



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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AUTO SAFETY HOTLINE  
(800) 424-9393  
Wash. D.C. Area 366-0123

**CASE SUMMARY**PSU 48 CASE NO. 227k TYPE OF ACCIDENT Car / Car - Acute Angle**A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES**

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

V1 was traveling east on a five lane divided roadway approaching an intersection controlled by a traffic signal light. V2 was traveling west approaching the intersection in the left turn lane. V3 was traveling north and was stopped at the intersection waiting for the signal light to change. V1 crossed through the intersection. V2 proceeded into the intersection and was attempting to turn left to travel south. The front of V1 struck the right side of V2. V1 rotated clockwise and came to rest in the intersection. V1 rotated slightly clockwise and slid sideways with its left side leading. V2 rolled over onto its top and continued to rotate clockwise. While on its top, the left rear of V2 contacted the right front of V3. V2 came to rest on its top. V3 came to rest at impact. V1 and V2 were towed from the scene due to disabling damage. V3 was driven away. The unrestrained driver of V1 was transported to a trauma center where he was treated and released. His unrestrained right front passenger was hospitalized at the trauma center. The restrained driver and passenger in V2 did not require medical treatment. The driver and passenger

**B. VEHICLE PROFILE(S)**

Vehicle No.	Class of Vehicle	Year/Make/Model	Most Severe Damage Based on Vehicle Inspection		Component Failure
			Damage Plane	Severity Description	
1	Subcompact	1986/Chevrolet/Spectrum	Front	Moderate	None
2	Pick Up	1989/GMC/S-15	Right	Moderate	None
3	Pick Up	1988/Chev/S-10	Front	Unknown	Unknown

**DO NOT SANITIZE THIS FORM**



### C. PERSON PROFILE(S)

Vehicle No.	Person Role	Seat Position	Restraint Use	Most Severe Injury (TO BE COMPLETED BY ZONE CENTER)			
				Body Region	Injury Type	AIS	Injury Source
1	Driver	Front Left	None				
1	Passenger	Front Rt.	None				
2	Driver	Front Left	Lap/Shou				
2	Passenger	Rt. Rt.	Lap/Shou				
3	Driver	Front Left	Unknown				
3	Passenger	Rt. Rt.	Unknown				

#### Body Region

Abdomen  
 Ankle—foot  
 Arm (upper)  
 Back-thoracolumbar spine  
 Brain  
 Chest  
 Ears  
 Eye  
 Elbow  
 Face  
 Forearm  
 Head—skull  
 Heart  
 Kidneys  
 Knee  
 Leg (lower)  
 Liver  
 Lower limbs(s) (whole or unknown part)  
 Mouth  
 Neck—cervical spine  
 Nose

Pelvic—hip  
 Pulmonary—lungs  
 Shoulder  
 Spleen  
 Thigh  
 Thyroid, other endocrine gland  
 Upper limb(s) (whole or unknown part)  
 Vertebrae  
 Whole body  
 Wrist—hand

#### Injury Type

Abrasion  
 Amputation  
 Avulsion  
 Burn  
 Concussion  
 Contusion  
 Crush  
 Detachment, separation  
 Dislocation

Fracture  
 Fracture and dislocation  
 Laceration  
 Other  
 Perforation, puncture  
 Rupture  
 Sprain  
 Strain  
 Total severance, transection  
 Unknown

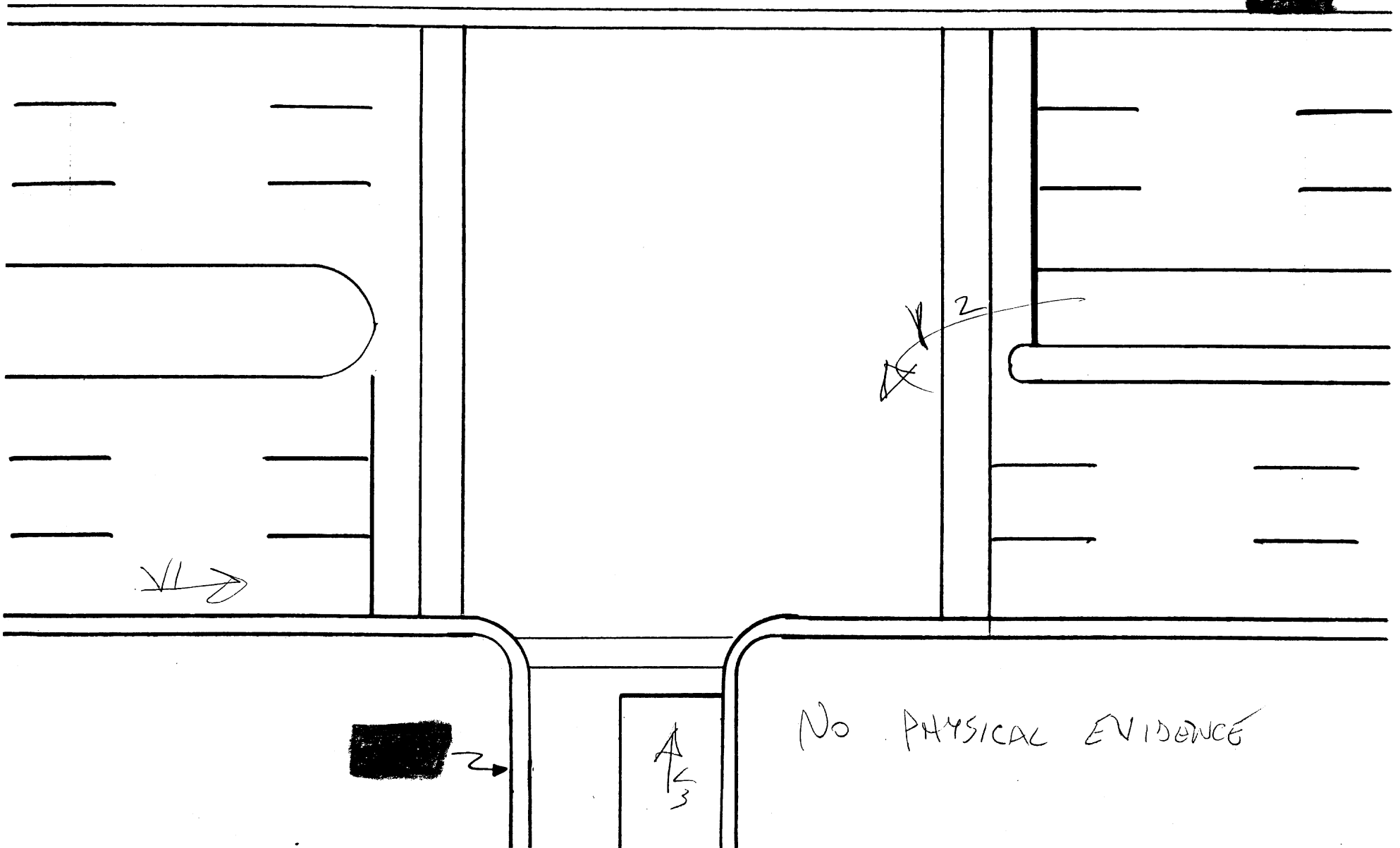
#### Abbreviated Injury Scale

(1) Minor injury  
 (2) Moderate injury  
 (3) Serious injury  
 (4) Severe injury  
 (5) Critical injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

DO NOT SANITIZE THIS FORM

BEST AVAILABLE

SKETCH

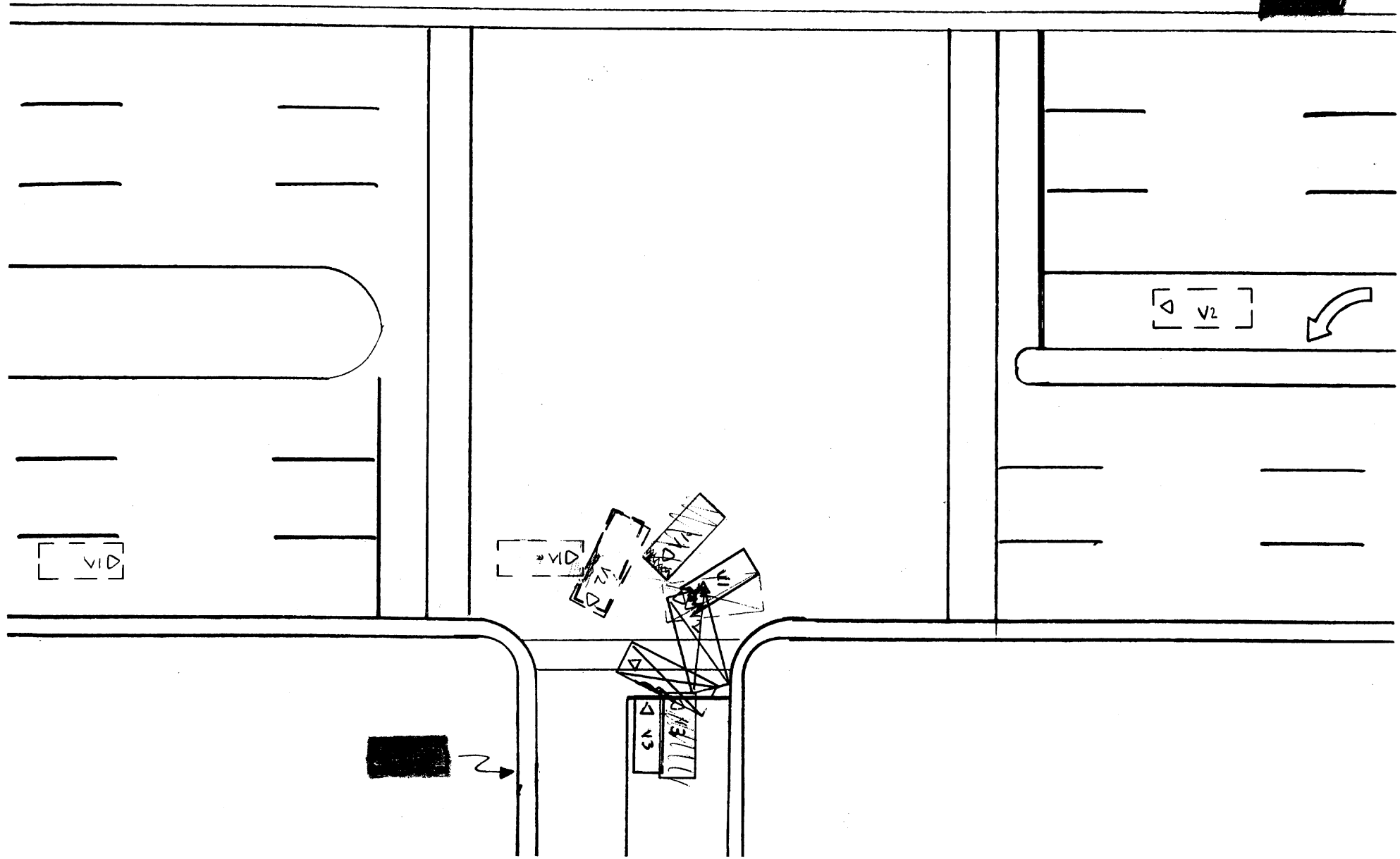


No PHYSICAL EVIDENCE

A  
K  
3

0 1 2 3 4 5  
M E T E R S

P48-227K



## ACCIDENT COLLISION MEASUREMENT TABLE

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

[illegible]

[illegible]



## ACCIDENT FORM

1. Primary Sampling Unit Number

48

2. Case Number - Stratum

227K

### IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted

03

4. Date of Accident  
(Month, Day, Year)

[REDACTED] 9 4

5. Time of Accident

0735

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

### SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6.    SS15 Administrative Use

0

7.    SS16 Pedestrian Crash Data Study

0

8.    SS17 Impact Fires

0

9.    SS18

0

10.    SS19

0

### NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident

03

Code the number of events which occurred  
in this accident.

### ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>01</u>	15. <u>F</u>	16. <u>02</u>	17. <u>15</u>	18. <u>R</u>
19. <u>02</u>	20. <u>02</u>	21. <u>15</u>	22. <u>T</u>	23. <u>31</u>	24. <u>00</u>	25. <u>N</u>
26. <u>03</u>	27. <u>02</u>	28. <u>15</u>	29. <u>L</u>	30. <u>03</u>	31. <u>15</u>	32. <u>F</u>
33. <u>04</u>	34. <u>  </u>	35. <u>  </u>	36. <u>  </u>	37. <u>  </u>	38. <u>  </u>	39. <u>  </u>
40. <u>05</u>	41. <u>  </u>	42. <u>  </u>	43. <u>  </u>	44. <u>  </u>	45. <u>  </u>	46. <u>  </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

### CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

### TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo  
area (rear of trailer or  
straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

### (01-30) — Vehicle Number

#### Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

- (35) Noncollision injury
- (38) Other noncollision (specify):

- (39) Noncollision — details unknown

#### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in  
diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify):

- (57) Fence

- (58) Wall

- (59) Building

- (60) Ditch or culvert

- (61) Ground

- (62) Fire hydrant

- (63) Curb

- (64) Bridge

- (68) Other fixed object (specify):

- (69) Unknown fixed object

#### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport

- (72) Pedestrian

- (73) Cyclist or cycle

- (74) Other nonmotorist or conveyance

- (75) Vehicle occupant

- (76) Animal

- (77) Train

- (78) Trailer, disconnected in transport

- (79) Object fell from vehicle in-transport

- (88) Other nonfixed object (specify):

- (89) Unknown nonfixed object

- (98) Other event (specify):

- (99) Unknown event or object

# OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle 0 2  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted 0 2

24. Rollover 0  
 (0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_
- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

# VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 0, 8 8 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
1,947 lbs X .4536 = 883 kgs  
 Source: \_\_\_\_\_
20. Vehicle Cargo Weight 0.0 0 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

# OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_
- Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_
- (7) Medium/heavy truck or bus override  
 (9) Unknown

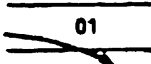





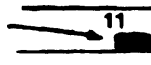


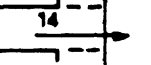
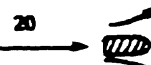

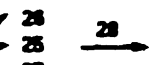
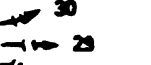
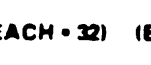



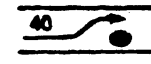
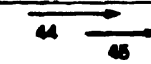
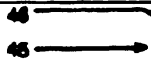
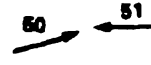










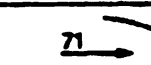
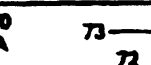
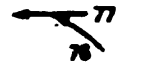

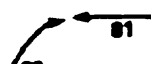




# RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

# HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
27. Heading Angle For This Vehicle 0 9 0
28. Heading Angle For Other Vehicle 2 0 8  
1 9 8



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 24 DECEL. 28, 29, 30, 31	 26 (EACH - 32) SPECIFICS OTHER	 28 (EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	41 (EACH - 42) (EACH - 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 (EACH - 48) SPECIFICS OTHER	 46 (EACH - 49) SPECIFICS UNKNOWN			
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 (EACH - 52) SPECIFICS OTHER	 52 (EACH - 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	61 (EACH - 62) (EACH - 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 65 (EACH - 66) SPECIFICS OTHER	 66 (EACH - 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 (EACH - 74) (EACH - 75) SPECIFICS OTHER SPECIFICS UNKNOWN		
	K Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 80 (EACH - 84) (EACH - 85) SPECIFICS OTHER SPECIFICS UNKNOWN		
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 (EACH - 90) SPECIFICS OTHER	 88 (EACH - 91) SPECIFICS UNKNOWN			
VI Miscellaneous	M Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

**OTHER DATA**

56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
     Code actual 5-digit zip code  
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):  
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify):  
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (8) Non-contact rollover forces (specify):  
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

**PRECRAASH DATA**

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object \_\_\_\_\_

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object \_\_\_\_\_

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object \_\_\_\_\_

## EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number <u>48</u> 2. Case Number - Stratum <u>227K</u>	3. Vehicle Number <u>01</u>
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## VEHICLE IDENTIFICATION

VIN J8 1 R F 7 7 7 8 G8 [REDACTED] Model Year 87  
 Vehicle Make (specify): Chev Vehicle Model (specify): SPECTRUM

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	ENTIRE FRONT	

## CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

**Use as many lines/columns as necessary to describe each damage profile.**

[illegible]

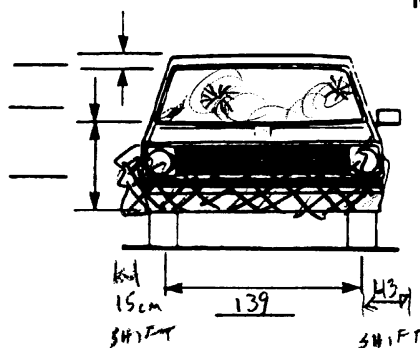
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>  94  </u> . <u>  5  </u>	inches	x 2.54	=	<u> 240 </u> cm
Overall Length	<u> 157 </u> . <u>  4 </u>	inches	x 2.54	=	<u>399.7</u> cm
Maximum Width	<u>  63 </u> . <u>  6 </u>	inches	x 2.54	=	<u>161.5</u> cm
Curb Weight	<u> 1,947 </u>	pounds	x .4536	=	<u>  883 </u> kg
Average Track	<u>54.7/54.3</u> .	inches	x 2.54	=	<u>      </u> cm
Front Overhang	<u>      </u> .	inches	x 2.54	=	<u>      </u> cm
Rear Overhang	<u>      </u> .	inches	x 2.54	=	<u>      </u> cm
Undeformed End Width	<u>      </u> .	inches	x 2.54	=	<u>      </u> cm
Engine Size: cyl./displ.	<u>      </u>	cc	x .001	=	<u>      </u> L
	<u>      </u>	CID	x .0164	=	<u>      </u> L

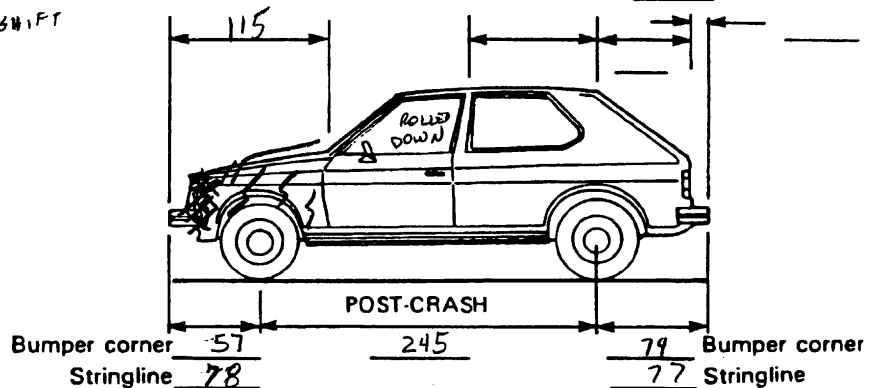
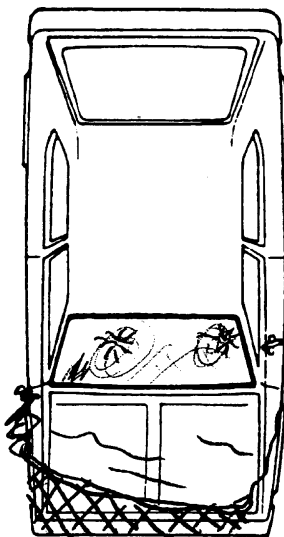
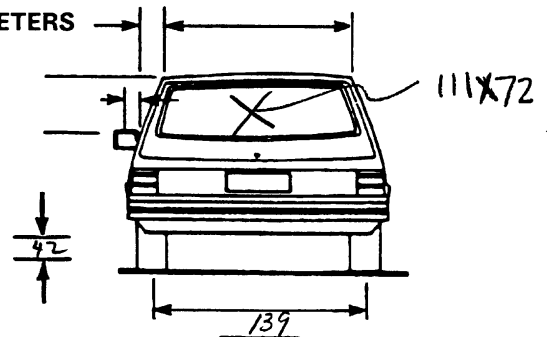
## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted    b. Tire deflated  RF <u>1</u> RF <u>1</u> LF <u>2</u> LF <u>2</u> RR <u>2</u> RR <u>2</u> LR <u>2</u> LR <u>2</u>  (1) Yes (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b>  Wheelbase <u>240</u> cm Overall Length <u>400</u> cm Maximum Width <u>162</u> cm Curb Weight <u>883</u> kg Average Track <u>139</u> cm Front Overhang <u>77</u> cm Rear Overhang <u>83</u> cm Undeformed End Width <u>150</u> cm Engine Size: cyl./displ. <u>4/1152</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF <u>0</u> <u>5</u> ° LF <u>0</u> <u>0</u> ° RR ± <u>1</u> <u>1</u> ° LR ± <u>1</u> <u>1</u> ° Within ± 5 degrees
<b>TYPE OF TRANSMISSION</b> <input checked="" type="checkbox"/> Manual <input type="checkbox"/> Automatic		<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD  Approximate Cargo Weight <u>?</u> kg		

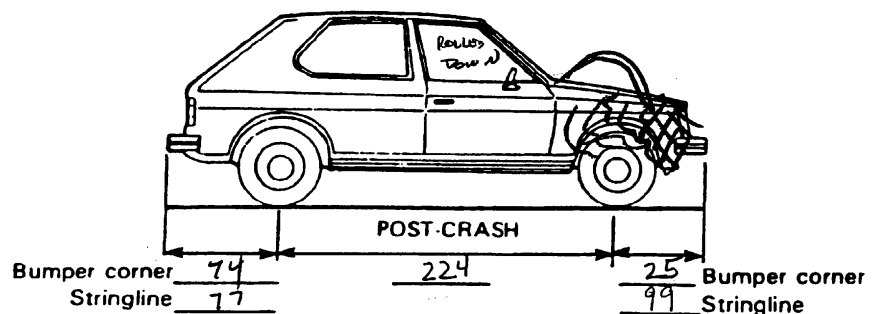
## MEASUREMENTS IN CENTIMETERS



Original  
Bumper height



Bumper corner Stringline 57 78 245 79 77 Bumper corner Stringline



Bumper corner Stringline 74 77 224 25 99 Bumper corner Stringline

NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

**CODES FOR OBJECT CONTACTED**

(99) Unknown event or object

[illegible]

**COLLISION DEFORMATION CLASSIFICATION****HIGHEST DELTA "V"**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>71</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

**Second Highest Delta "V"**

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

**CRUSH PROFILE IN CENTIMETERS**

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

**HIGHEST DELTA "V"**

20. L	21. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>128</u>	<u>018</u>	<u>022</u>	<u>029</u>	<u>034</u>	<u>045</u>	<u>067</u>	<u>+000</u>

**Second Highest Delta "V"**

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
_____	_____	_____	_____	_____	_____	_____	_____

26. Are CDCs Documented but Not Coded on The Automated File? 0

(0) No  
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1

(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

28. Original Wheelbase 240  
Code to the nearest centimeter  
(999) Unknown

94.5 inches X 2.54 = 240 centimeters



29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

30. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

31. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

- (9) Unknown

32. Type of Fuel Tank-1

33. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

34. Fuel Tank-1 Location

35. Fuel Tank-2 Location

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_

- (9) Unknown

36. Fuel Tank-1 Filler Cap Location

37. Fuel Tank-2 Filler Cap Location

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle) on  
left side plane  
(3) Aft of center of the rear wheels (rear axle) on  
right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear axle)  
on left side plane  
(7) Over the center of the rear wheels (rear axle)  
on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

38. Fuel Tank-1 Damage

39. Fuel Tank-2 Damage

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_

- (9) Unknown

<p>40. Location of Fuel System-1 Leakage <span style="float: right;"><u>1</u></span></p> <p>41. Location of Fuel System-2 Leakage <span style="float: right;"><u>0</u></span></p> <p style="margin-left: 20px;">(0) No fuel tank</p> <p style="margin-left: 20px;">(1) No fuel leakage</p> <p style="margin-left: 20px;"><i>Primary Area Of Leakage</i></p> <p style="margin-left: 20px;">(2) Tank</p> <p style="margin-left: 20px;">(3) Filler neck</p> <p style="margin-left: 20px;">(4) Cap</p> <p style="margin-left: 20px;">(5) Lines/pump/filter</p> <p style="margin-left: 20px;">(6) Vent/emission recovery</p> <p style="margin-left: 20px;">(8) Other (specify): _____</p> <p style="margin-left: 20px;">(9) Unknown _____</p> <p>42. Fuel Type-1 <span style="float: right;"><u>01</u></span></p> <p>43. Fuel Type-2 <span style="float: right;"><u>00</u></span></p> <p style="margin-left: 20px;"><i>Single Fuel Type</i></p> <p style="margin-left: 20px;">(00) No fuel tank</p> <p style="margin-left: 20px;">(01) Gasoline</p> <p style="margin-left: 20px;">(02) Diesel</p> <p style="margin-left: 20px;">(03) CNG (Compressed Natural Gas)</p> <p style="margin-left: 20px;">(04) LPG (Liquid Petroleum Gas) also known as Propane</p> <p style="margin-left: 20px;">(05) LNG (Liquid Natural Gas)</p> <p style="margin-left: 20px;">(06) Methanol (M100 or M85)</p> <p style="margin-left: 20px;">(07) Ethanol (E100 or E85)</p> <p style="margin-left: 20px;">(08) Other (Hydrogen or others) (specify): _____</p> <p style="margin-left: 20px;"><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p style="margin-left: 20px;">(10) Lead Acid Battery</p> <p style="margin-left: 20px;">(11) Nickel-Iron Battery</p> <p style="margin-left: 20px;">(12) Nickel-Cadmium Battery</p> <p style="margin-left: 20px;">(13) Sodium Metal Chloride Battery</p> <p style="margin-left: 20px;">(14) Sodium Sulfur Battery</p> <p style="margin-left: 20px;">(18) Other (Specify): _____</p> <p style="margin-left: 20px;">(98) Other Hybrid (specify): _____</p> <p style="margin-left: 20px;">(99) Unknown fuel type</p>	<p>44. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float: right;"><u>0</u></span></p> <p style="margin-left: 20px;">(0) No (one or two tanks only)</p> <p style="margin-left: 20px;"><i>Yes - More Than Two Tanks</i></p> <p style="margin-left: 20px;">(1) Yes -- <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u></p> <p style="margin-left: 20px;">(2) Yes -- <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____</p> <p style="margin-left: 20px;">(3) Yes -- <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following):</p> <p style="margin-left: 40px;">Type of tank _____</p> <p style="margin-left: 40px;">Tank location _____</p> <p style="margin-left: 40px;">Filler cap location _____</p> <p style="margin-left: 40px;">Tank damage _____</p> <p style="margin-left: 40px;">Location of leakage _____</p> <p style="margin-left: 40px;">Type of fuel _____</p> <p style="margin-left: 20px;">(9) Unknown if more than two tanks</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>COMMENTS</b> </div> <div style="border: 1px solid black; height: 150px; margin-top: 5px;"></div>
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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*

(I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48

2. Case Number - Stratum 227K

3. Vehicle Number 01

### INTEGRITY

4. Passenger Compartment Integrity 07

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side) RF

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 0 8. RR 0 9. TG/H 1

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

### GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 0 17. RF 0 18. LR 0 19. RR 0

20. BL 6 21. Roof 0 22. Other 0

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(5) Glazing out-of-place by occupant contact and holed by occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 0 35. RR 0

36. BL 8 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 0 41. RF 0 42. LR 0 43. RR 0

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

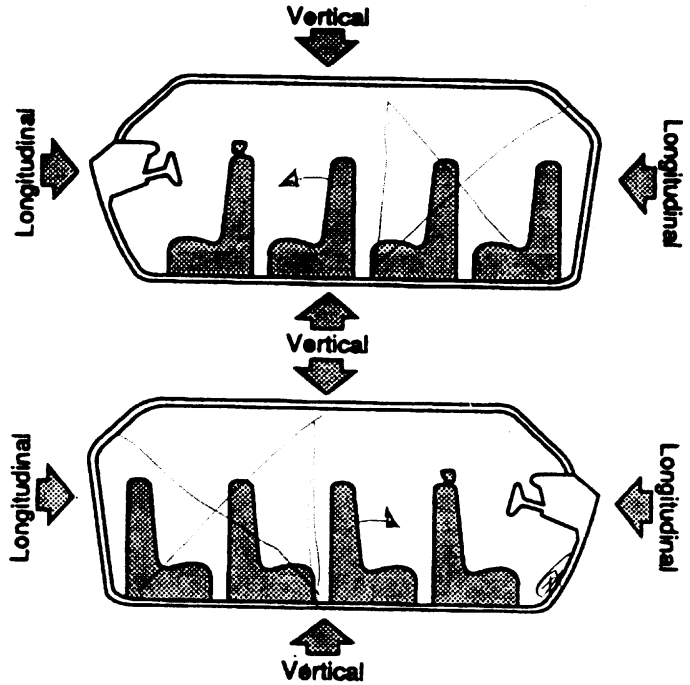
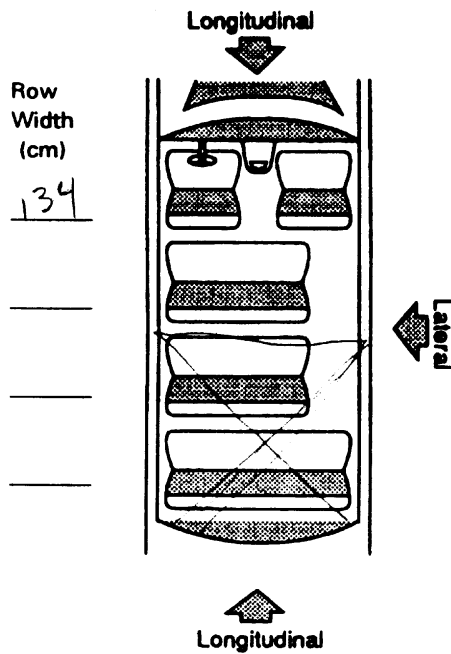
(3) Partially opened

(4) Fully opened

(9) Unknown

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION		
RF	TOE PAD	139	121	18		LONG
LR	SEATBACK	80	69	11		
RG	"	80	58(?)	20		
RQ	"		unknown			

Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>13</u>	48. <u>05</u>	49. <u>3</u>	50. <u>2</u>
2nd	51. <u>22</u>	52. <u>19</u>	53. <u>3</u>	54. <u>2</u>
3rd	55. <u>21</u>	56. <u>19</u>	57. <u>2</u>	58. <u>2</u>
4th	59. <u>99</u>	60. <u>99</u>	61. <u>9</u>	62. <u>9</u>
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify)

(99) Unknown

## INTRUDING COMPONENT

*Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—	N/A	=	
--	---	-----	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

**STEERING COLUMN**

87. Steering Column Type 1
- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_  
 (9) Unknown

88. Blank X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

89. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

90. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

91. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

92. Steering Rim/Spoke Deformation 0 0  
 Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

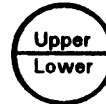
93. Location of Steering Rim/Spoke Deformation 0 0  
 (00) No steering rim deformation

*Quarter Sections*

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

**INSTRUMENT PANEL**

94. Odometer Reading 261,000

\_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

162,430 miles  $\times 1.6093 =$  261,398 kilometers

Source: VI

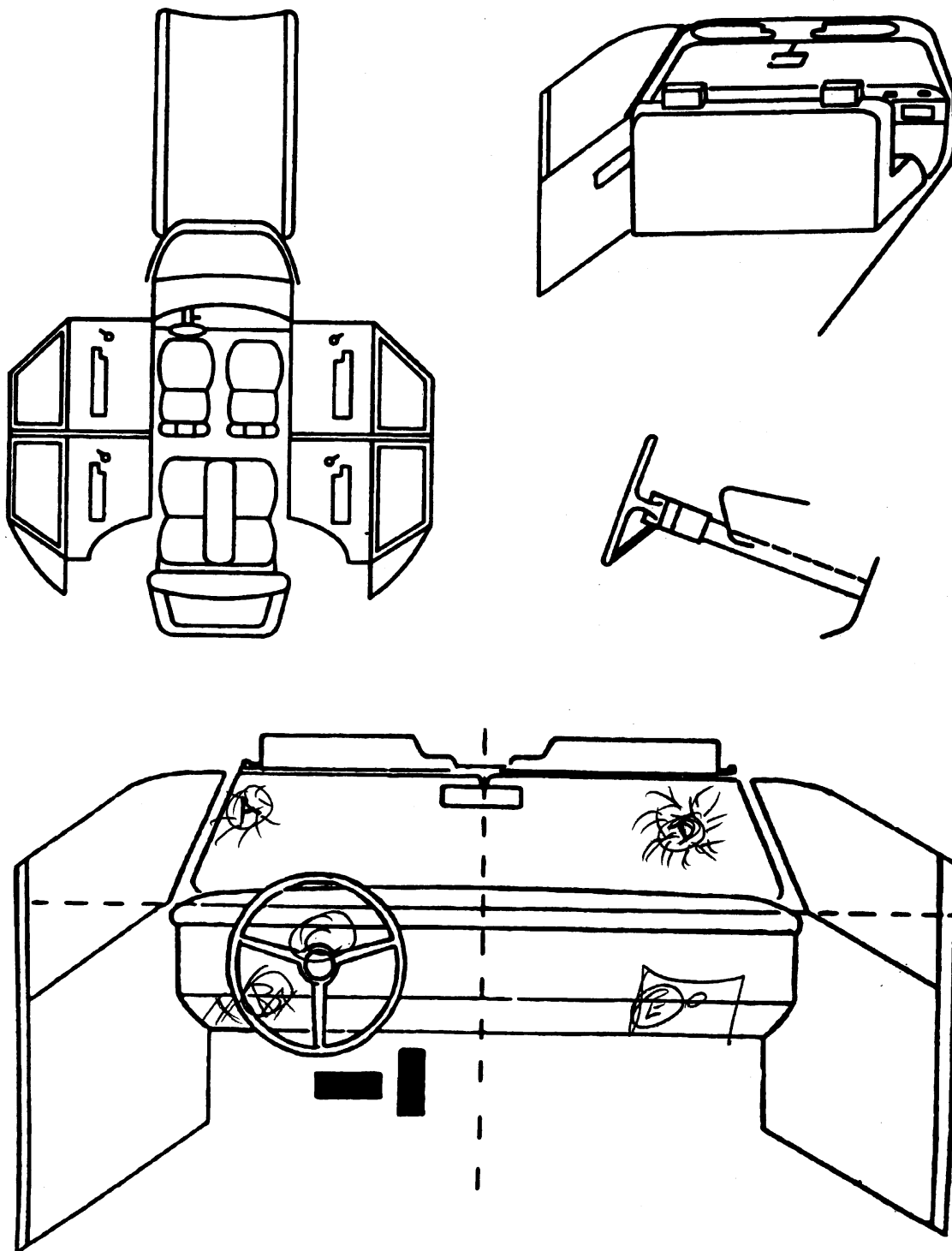
95. Instrument Panel Damage from Occupant Contact? 1  
 (0) No  
 (1) Yes  
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 8  
 (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 0  
 (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.



## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	W.S.	1	HEAD	SPIDERWEB CRACK	1
B	DASH	1	KNEE	BUSTED	1
C	S.W.	1	CHEST	COLUMN BUSTED	1
D	W.S.	2	HEAD	SPIDERWEB CRACK	1
E	GLOVE BOX	2	KNEE	DEFORMED	1
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

## (23) Left B-pillar

## (24) Other left pillar (specify): \_\_\_\_\_

## (25) Left side window glass or frame

## (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

## (27) Other left side object (specify): \_\_\_\_\_

## (28) Left side window sill

## RIGHT SIDE

## (30) Right side interior surface, excluding hardware or armrests

## (31) Right side hardware or armrest

## (32) Right A (A1/A2)-pillar

## (33) Right B-pillar

## (34) Other right pillar (specify): \_\_\_\_\_

## (35) Right side window glass or frame

## (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

## (37) Other right side object (specify): \_\_\_\_\_

## (38) Right side window sill

## INTERIOR

## (40) Seat, back support

## (41) Belt restraint webbing/buckle

## (42) Belt restraint B-pillar attachment point

## (43) Other restraint system component (specify): \_\_\_\_\_

## (44) Head restraint system

## (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

## (46) Other occupants (specify): \_\_\_\_\_

## (47) Interior loose objects

## (48) Child safety seat (specify): \_\_\_\_\_

## (49) Other interior object (specify): \_\_\_\_\_

## ROOF

## (50) Front header

## (51) Rear header

## (52) Roof left side rail

## (53) Roof right side rail

## (54) Roof or convertible top

## FLOOR

## (56) Floor (including toe pan)

## (57) Floor or console mounted transmission lever, including console

## (58) Parking brake handle

## (59) Foot controls including parking brake

## REAR

## (60) Backlight (rear window)

## (61) Backlight storage rack, door, etc.

## (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function	9	9
	Deployment	9	9
	Failure		

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

#### Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	9	9
	Use		
	Type		
	Proper Use		
	Failure Modes		

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown

**MANUAL RESTRAINTS**

**NOTES:** Encode the applicable data for **each seat position** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F I R S T	Availability	4	0	4
	Evidence of usage	00	00	00
	Used in this crash?	0	0	0
	Proper Use	0	0	0
	Failure Modes	0	0	0
S E C O N D	Availability	3	3	3
	Evidence of usage	00	00	00
	Used in this crash?	0	0	0
	Proper Use	0	0	0
	Failure Modes	0	0	0
O T H E R	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): \_\_\_\_\_
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

**Proper Use of Manual (Active) Belts**

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

**Belt Used Improperly**

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage			N/A			
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): \_\_\_\_\_
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): \_\_\_\_\_
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): \_\_\_\_\_

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): \_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

(00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	00	02
	Seat Performance	1	0	1
	Seat Orientation	1	0	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	07	07	07
	Seat Performance	3	3	3
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_

(10) Box mounted seat (i.e., van type)  
(99) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

None

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [ ☒ ] Yes [ ☐ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [ ☒ ] Yes [ ☐ ]

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)



## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

48

2. Case Number - Stratum

2 2 7 K

3. Vehicle Number

0 1

4. Occupant Number

0 1

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

75 inches X 2.54 = 190.5 centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

180 pounds X .4536 = 81.6 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown



## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## 26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat 0  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify):  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00  
 (00) No child safety seat  
*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):  
 (09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):  
 (19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
 (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):  
 (29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA31-OA33.  
 (00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 05

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**Check the Primary Source Used In Determining Belt Use.**

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

**ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?**

NO [ ] YES ☒

**UPDATE CANDIDATE?**

NO ☒ YES [ ]

**STOP - VARIABLES 50 THROUGH 53 ARE  
COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)  
(00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the  
initial GCS Score recorded at medical  
facility.  
(97) Injured, details unknown  
(99) Unknown if injured
51. Was the Occupant Given Blood? 1  
(1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given
52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
(00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination 2  
(0) Not equipped/not available/destroyed  
or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

48

3. Vehicle Number

01

2. Case Number - Stratum

227K

4. Occupant Number

01

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90							Injury Source	Injury Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
1st	5. <u>3</u>	6. <u>2</u>	7. <u>9</u>	8. <u>06</u>	9. <u>02</u>	10. <u>1</u>	11. <u>4</u>	12. <u>01</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>3</u>	17. <u>2</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>4</u>	23. <u>01</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>3</u>	28. <u>1</u>	29. <u>9</u>	30. <u>06</u>	31. <u>02</u>	32. <u>1</u>	33. <u>5</u>	34. <u>01</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>3</u>	39. <u>2</u>	40. <u>9</u>	41. <u>06</u>	42. <u>02</u>	43. <u>1</u>	44. <u>8</u>	45. <u>01</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>3</u>	50. <u>9</u>	51. <u>9</u>	52. <u>04</u>	53. <u>00</u>	54. <u>1</u>	55. <u>9</u>	56. <u>97</u>	57. <u>9</u>	58. <u>7</u>	59. <u>99</u>
6th	60. <u>  </u>	61. <u>  </u>	62. <u>  </u>	63. <u>  </u>	64. <u>  </u>	65. <u>  </u>	66. <u>  </u>	67. <u>  </u>	68. <u>  </u>	69. <u>  </u>	70. <u>  </u>
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

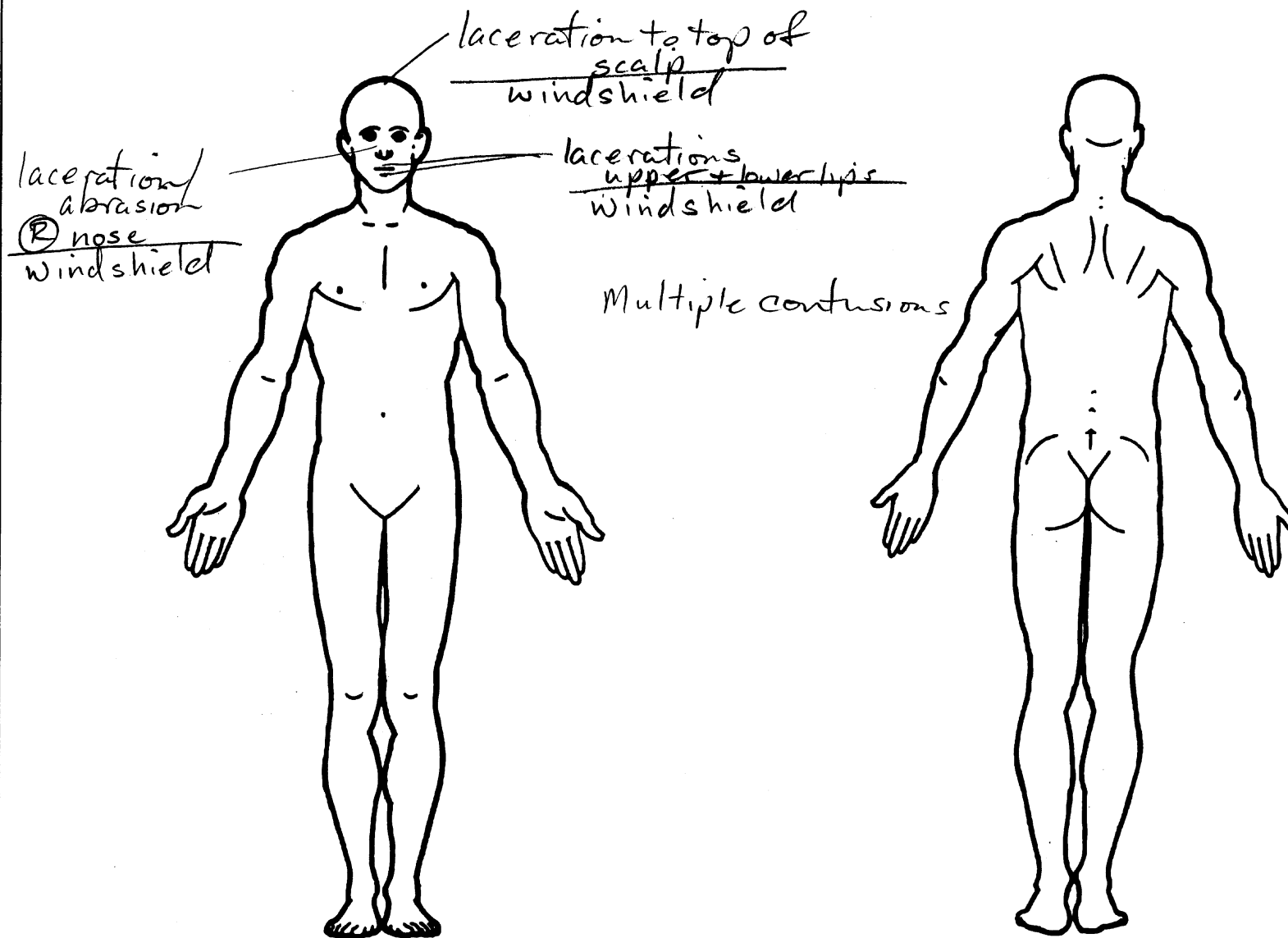
# OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90				Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury					
11th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	— — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	— — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	— — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	— — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	— — —	—	—	— — —



## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## SOURCE OF INJURY DATA

### OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface

- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

#### Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

#### Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

### Vessels, Nerves, Organs, Bones,

Joints are assigned consecutive two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

### Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

☐ No

☐ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood  
Gases

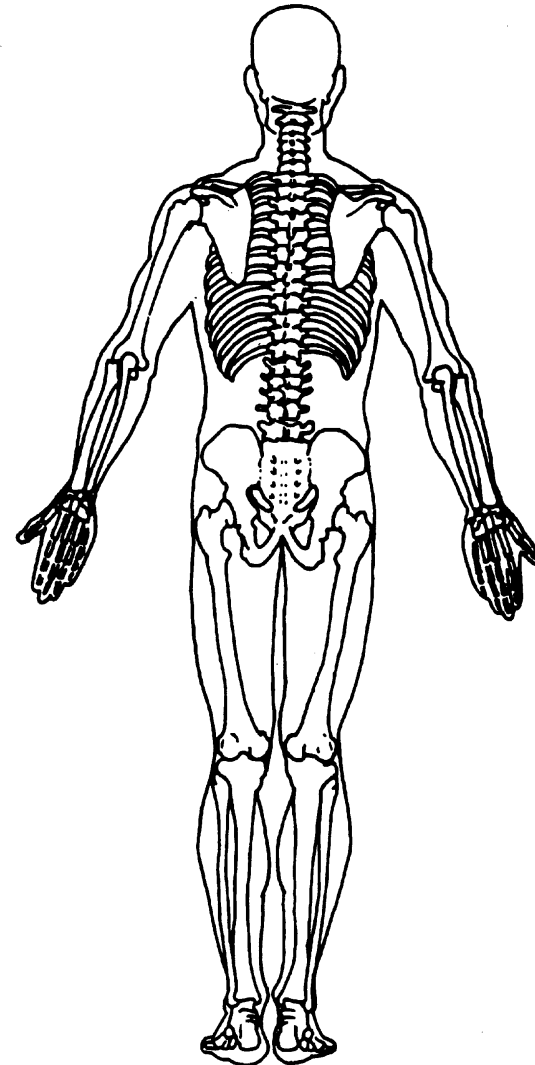
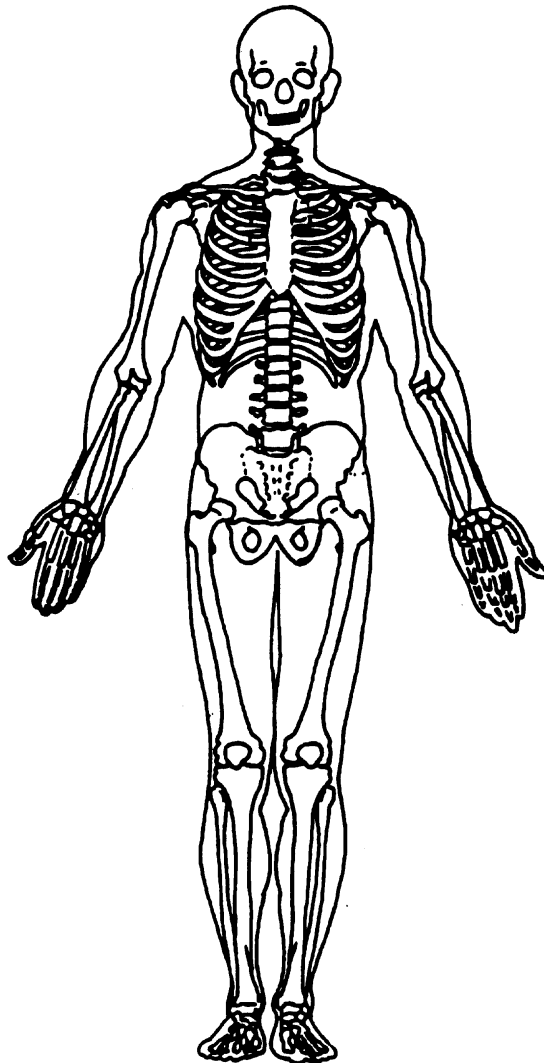
pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

PCO<sub>2</sub> \_\_\_\_

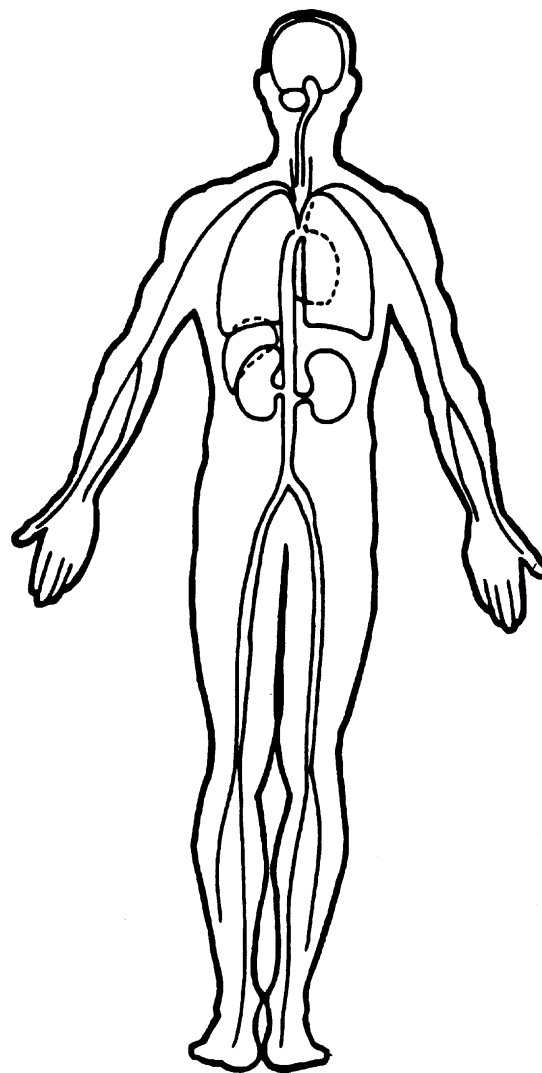
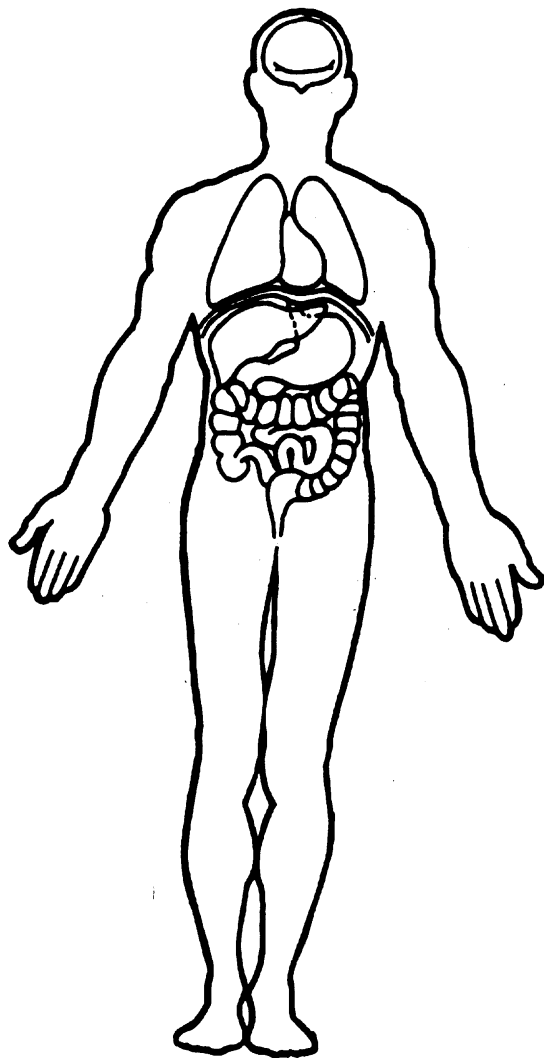
HCO<sub>3</sub> \_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 48  
2. Case Number - Stratum 227K  
3. Vehicle Number 01  
4. Occupant Number 02

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 16  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown *Don't know*
6. Occupant's Sex 1  
(1) Male  
(2) Female  
(9) Unknown
7. Occupant's Height 183  
Code actual height to the nearest centimeter.  
(999) Unknown  
72 inches X 2.54 = 182.8 centimeters
8. Occupant's Weight 070  
Code actual weight to the nearest kilogram.  
(999) Unknown  
155 pounds X .4536 = 70.3 kilograms
9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position 13  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant
- (97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown
11. Occupant's Posture 0  
(0) Normal posture
- Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## 26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown



## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 032. Child Safety Seat Shield Usage 0 033. Child Safety Seat Tether Usage 0 0Note: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 01

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 05

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [ ] YES ☒

UPDATE CANDIDATE?

NO ☒ YES [ ]

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)  
(00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured
51. Was the Occupant Given Blood? 1  
(1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given
52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
(00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination 1  
(0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

48

3. Vehicle Number

01

2. Case Number - Stratum

227K

4. Occupant Number

02

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90							Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
1st	5. 2	6. 1	7. 6	8. 02	9. 02	10. 2	11. 0	12. 01	13. 2	14. 1	15. 00
2nd	16. 2	17. 2	18. 9	19. 06	20. 02	21. 1	22. 7	23. 01	24. 1	25. 1	26. 00
3rd	27. 2	28. 2	29. 9	30. 02	31. 02	32. 1	33. 7	34. 01	35. 1	36. 1	37. 00
4th	38. 2	39. 2	40. 9	41. 02	42. 02	43. 1	44. 4	45. 01	46. 1	47. 1	48. 00
5th	49. 2	50. 2	51. 9	52. 76	53. 00	54. 1	55. 1	56. 01	57. 1	58. 1	59. 00
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

**.I.S. - 90**

	Source of Injury Data	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
11th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

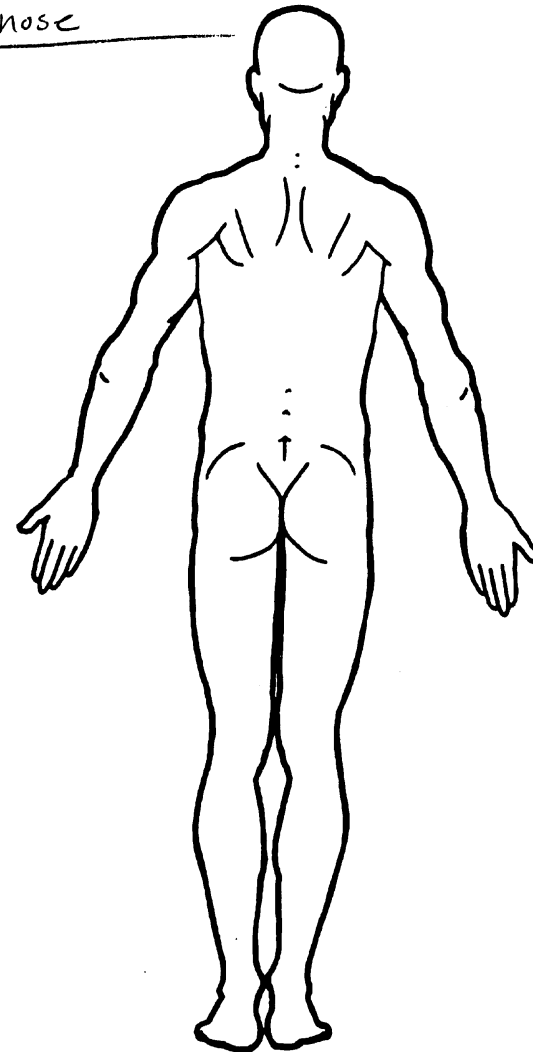
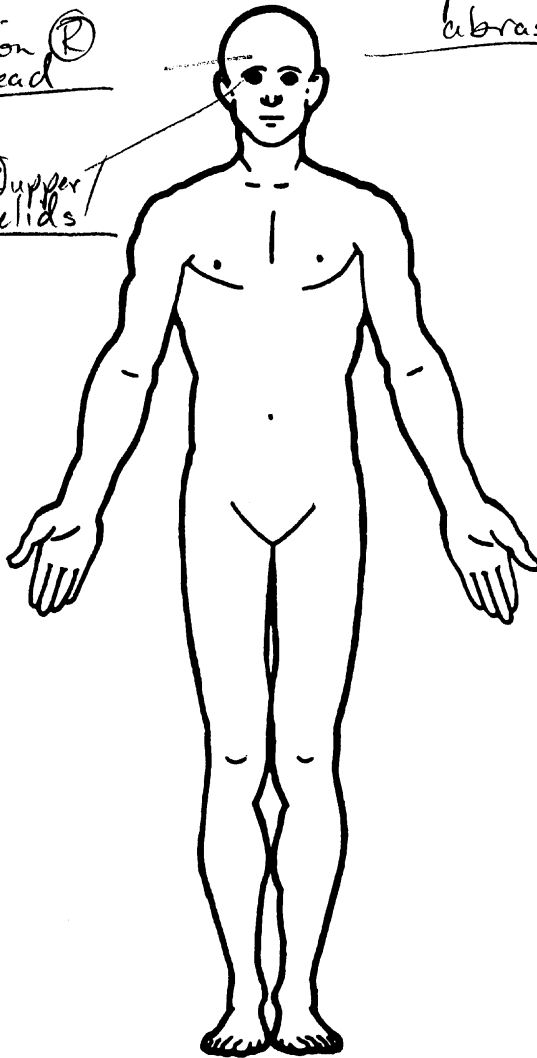
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

*All from windshield*

*Multiple facial punctate lacerations,  
abrasions forehead, nose  
windshield*

*laceration (R)  
forehead*

*laceration (upper)  
lower eyelids*



## SOURCE OF INJURY DATA

### OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface

- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

#### Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

#### Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones,  
Joints are assigned consecutive two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

### Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region



PSU NUMBER	<u>48</u>
CASE NUMBER	<u>227K</u>
VEHICLE NUMBER	<u>01</u>
OCCUPANT NUMBER	<u>02</u>

# OCCUPANT INJURY FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*

☐ ENTIRE FORM

☒ PAGE NUMBER (S) 3

### OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle 02  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted 02

24. Rollover 2  
 (0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_
- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

### VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1,200  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2,648 lbs X .4536 = 1,201 kgs  
 Source: \_\_\_\_\_
20. Vehicle Cargo Weight 0.000  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

### OVERRIDE/UNDERRIDE (THIS VEHICLE)

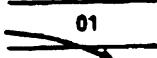

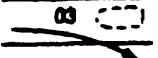



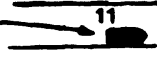


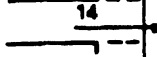
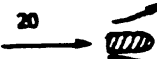

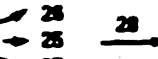
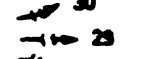



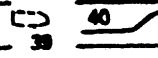
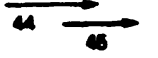









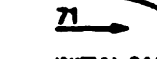
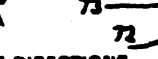





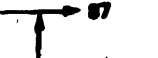

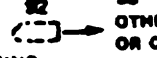

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0  
 (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_
- Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_
- (7) Medium/heavy truck or bus override  
 (9) Unknown

### RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

### HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
27. Heading Angle For This Vehicle 198  
208
28. Heading Angle For Other Vehicle 090

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 24 DECEL. 28, 29, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH - 32) SPECIFICS OTHER (EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 35 CONTROL/ TRACTION LOSS	 36 AVOID COLLISION WITH VEH.	 37 AVOID COLLISION WITH OBJECT	(EACH - 42) SPECIFICS OTHER (EACH - 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 SIDESWIPE	 45 SIDESWIPE	 46 SIDESWIPE	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 55 CONTROL/ TRACTION LOSS	 56 AVOID COLLISION WITH VEH.	 57 AVOID COLLISION WITH OBJECT	(EACH - 62) SPECIFICS OTHER (EACH - 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 69 INITIAL SAME DIRECTIONS	 70 TURN ACROSS PATH	 71 TURN ACROSS PATH	(EACH - 74) SPECIFICS OTHER (EACH - 75) SPECIFICS UNKNOWN
	K Turn Into Path	 77 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 79 TURN INTO OPPOSITE DIRECTIONS	 80 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER (EACH - 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 87 STRAIGHT PATHS	 88 STRAIGHT PATHS	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

## OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):  
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify):  
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (8) Non-contact rollover forces (specify):  
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number <u>48</u> 2. Case Number - Stratum <u>227K</u>	3. Vehicle Number <u>02</u>
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## VEHICLE IDENTIFICATION

VIN 1GTBS14E7K2 [REDACTED] Model Year 3/89  
Vehicle Make (specify): GMC Vehicle Model (specify): S15

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	STREET 46cm FORWARD OF RR AXLE	SAME

### CRUSH PROFILE IN CENTIMETERS

**NOTES:** Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure and document on the vehicle diagram the location of maximum crush.**

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

**Use as many lines/columns as necessary to describe each damage profile.**

[illegible]

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase 108.3 inches x 2.54 = 275 cm  
 Overall Length 178.2 inches x 2.54 = 453 cm  
 Maximum Width 64.7 inches x 2.54 = 164 cm  
 Curb Weight 2,648<sup>(4)</sup> pounds x .4536 = 1201 kg  
 Average Track \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Front Overhang \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Rear Overhang \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Undeformed End Width \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Engine Size: cyl./displ. \_\_\_\_\_ cc x .001 = \_\_\_\_\_ L  
 \_\_\_\_\_ CID x .0164 = \_\_\_\_\_ L

## VEHICLE DAMAGE SKETCH

## TIRE—WHEEL DAMAGE

a. Rotation physically restricted      b. Tire deflated

RF 2  
LF 2  
RR 2  
LR 2

RF 2  
LF 2  
RR 2  
LR 2

(1) Yes (2) No (8) NA (9) Unk.

## ORIGINAL SPECIFICATIONS

Wheelbase 275 cm  
Overall Length 453 cm  
Maximum Width 164 cm  
Curb Weight 1201 kg  
Average Track 147 cm  
Front Overhang 78 cm  
Rear Overhang 100 cm  
Undeformed End Width        cm  
Engine Size: cyl./displ. 4/2.5 L

WHEEL STEER ANGLES  
(For locked front wheels or displaced rear axles only)

RF ±        °  
LF ±        °  
RR ±        °  
LR ±        °

Within ± 5 degrees

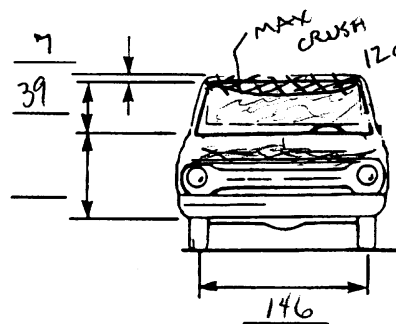
## DRIVE WHEELS

☐ FWD ☒ RWD ☐ 4WD

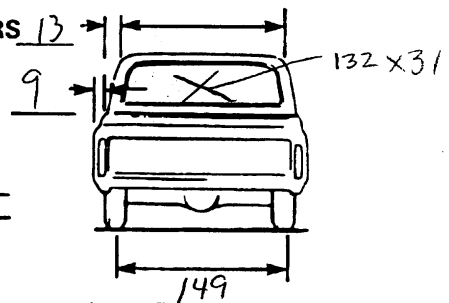
Approximate Cargo Weight 0 kg

## TYPE OF TRANSMISSION

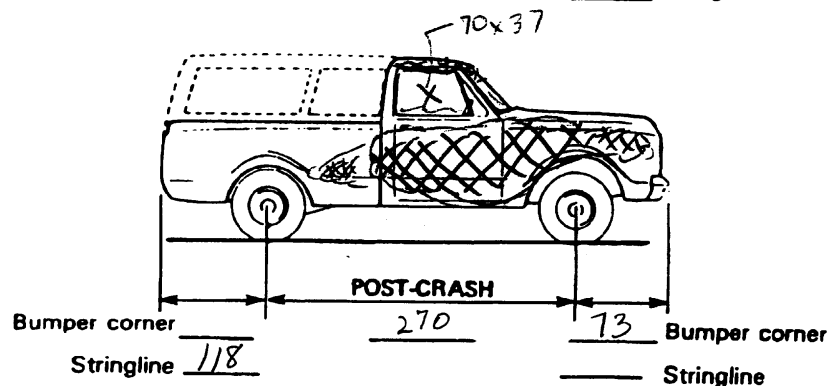
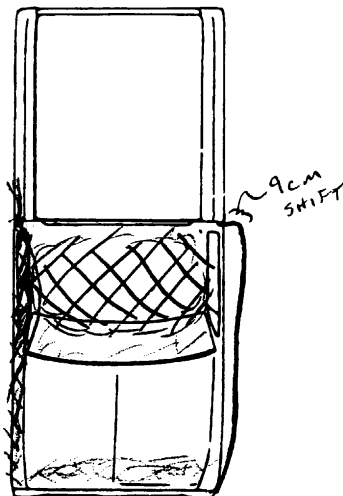
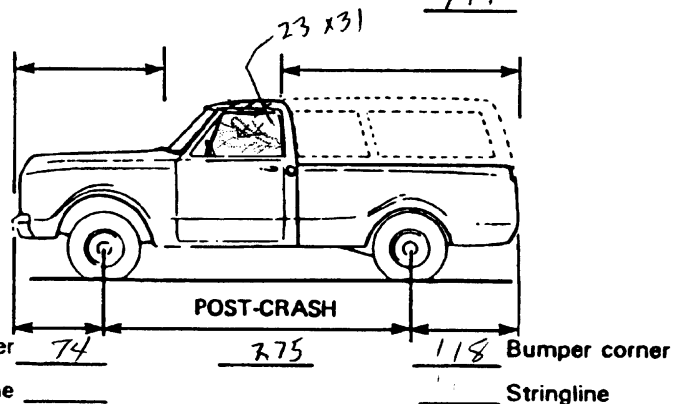
☒ Manual ☐ Automatic



## MEASUREMENTS IN CENTIMETERS



Original Bumper height 39



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.



### CODES FOR OBJECT CONTACTED

## DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>OK</u> <u>02</u> <u>01</u>	7. <u>R</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

## Second Highest Delta "V"

12. <u>02</u>	13. <u>31</u>	14. <u>00</u>	15. <u>T</u>	16. <u>D</u>	17. <u>Y</u>	18. <u>0</u>	19. <u>03</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. L	21. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>278</u>	<u>000</u>	<u>018</u>	<u>027</u>	<u>016</u>	<u>006</u>	<u>000</u>	<u>⊕</u> <u>- 185</u>

## Second Highest Delta "V"

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

26. Are CDCs Documented  
but Not Coded on The  
Automated File?  
(0) No  
(1) Yes

1

27. Researcher's Assessment  
of Vehicle Disposition  
(0) Not towed due to  
vehicle damage  
(1) Towed due to  
vehicle damage  
(9) Unknown

1

28. Original Wheelbase 275  
Code to the  
nearest centimeter  
(999) Unknown

108.3 inches X 2.54 = 275 centimeters

<p>29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? <u>0</u></p> <p>(0) No post manufacturer modifications (1) Yes - post manufacturer modifications (specify): _____</p> <p>_____ (Include photograph of CERTIFICATION PLACARD in case report)</p> <p>(9) Unknown if vehicle is modified</p>	<p>34. Fuel Tank-1 Location <u>4</u></p> <p>35. Fuel Tank-2 Location <u>0</u></p> <p>(0) No fuel tank (1) Aft of center of the rear wheels (rear axle) centered (2) Aft of center of the rear wheels (rear axle) left side (3) Aft of center of the rear wheels (rear axle) right side (4) Forward of center of the rear wheels (rear axle) centered (5) Forward of center of the rear wheels (rear axle) left side (6) Forward of center of the rear wheels (rear axle) right side (7) Over center of the rear wheels (rear axle) (8) Other (specify): _____ (9) Unknown</p>
<p>30. Fire Occurrence <u>0</u></p> <p>(0) No fire</p> <p>Yes, fire occurred (1) Minor (2) Major (9) Unknown</p>	
<p>31. Origin of Fire <u>0</u></p> <p>(0) No fire (1) Vehicle exterior (front, side, back, top) (2) Exhaust system (3) Fuel tank (and other fuel retention system parts) (4) Engine compartment (5) Cargo/trunk compartment (6) Instrument panel (7) Passenger compartment area (8) Other location (specify): _____ (9) Unknown</p>	<p>36. Fuel Tank-1 Filler Cap Location <u>5</u></p> <p>37. Fuel Tank-2 Filler Cap Location <u>0</u></p> <p>(0) No fuel tank (1) On back plane (2) Aft of center of the rear wheels (rear axle) on left side plane (3) Aft of center of the rear wheels (rear axle) on right side plane (4) Forward of center of the rear wheels (rear axle) on left side plane (5) Forward of center of the rear wheels (rear axle) on right side plane (6) Over the center of the rear wheels (rear axle) on left side plane (7) Over the center of the rear wheels (rear axle) on right side plane (8) Other (specify): _____ (9) Unknown</p>
<p>32. Type of Fuel Tank-1 <u>1</u></p> <p>33. Type of Fuel Tank-2 <u>0</u></p> <p>(0) No fuel tank (electrical vehicle) (1) Metallic (2) Non-metallic (9) Unknown</p>	<p>38. Fuel Tank-1 Damage <u>1</u></p> <p>39. Fuel Tank-2 Damage <u>0</u></p> <p>(0) No fuel tank (1) No damage to fuel tank (2) Deformed, no seam failure (3) Deformed, with a seam failure (4) Punctured (5) Lacerated (ripped) (6) Abraded (scraped) (7) Filler neck separation from the fuel tank (8) Other damage (specify): _____ (9) Unknown</p>

<p>40. Location of Fuel System-1 Leakage <span style="float: right;"><u>1</u></span></p> <p>41. Location of Fuel System-2 Leakage <span style="float: right;"><u>0</u></span></p> <p style="margin-left: 20px;">(0) No fuel tank</p> <p style="margin-left: 20px;">(1) No fuel leakage</p> <p style="margin-left: 20px;"><i>Primary Area Of Leakage</i></p> <p style="margin-left: 20px;">(2) Tank</p> <p style="margin-left: 20px;">(3) Filler neck</p> <p style="margin-left: 20px;">(4) Cap</p> <p style="margin-left: 20px;">(5) Lines/pump/filter</p> <p style="margin-left: 20px;">(6) Vent/emission recovery</p> <p style="margin-left: 20px;">(8) Other (specify): _____</p> <p style="margin-left: 20px;">(9) Unknown</p> <p>42. Fuel Type-1 <span style="float: right;"><u>0 1</u></span></p> <p>43. Fuel Type-2 <span style="float: right;"><u>0 0</u></span></p> <p style="margin-left: 20px;"><i>Single Fuel Type</i></p> <p style="margin-left: 20px;">(00) No fuel tank</p> <p style="margin-left: 20px;">(01) Gasoline</p> <p style="margin-left: 20px;">(02) Diesel</p> <p style="margin-left: 20px;">(03) CNG (Compressed Natural Gas)</p> <p style="margin-left: 20px;">(04) LPG (Liquid Petroleum Gas) also known as Propane</p> <p style="margin-left: 20px;">(05) LNG (Liquid Natural Gas)</p> <p style="margin-left: 20px;">(06) Methanol (M100 or M85)</p> <p style="margin-left: 20px;">(07) Ethanol (E100 or E85)</p> <p style="margin-left: 20px;">(08) Other (Hydrogen or others) (specify): _____</p> <p style="margin-left: 20px;"><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p style="margin-left: 20px;">(10) Lead Acid Battery</p> <p style="margin-left: 20px;">(11) Nickel-Iron Battery</p> <p style="margin-left: 20px;">(12) Nickel-Cadmium Battery</p> <p style="margin-left: 20px;">(13) Sodium Metal Chloride Battery</p> <p style="margin-left: 20px;">(14) Sodium Sulfur Battery</p> <p style="margin-left: 20px;">(18) Other (Specify): _____</p> <p style="margin-left: 20px;">(98) Other Hybrid (specify): _____</p> <p style="margin-left: 20px;">(99) Unknown fuel type</p>	<p>44. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float: right;"><u>0</u></span></p> <p style="margin-left: 20px;">(0) No (one or two tanks only)</p> <p style="margin-left: 20px;"><i>Yes - More Than Two Tanks</i></p> <p style="margin-left: 20px;">(1) Yes -- <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u></p> <p style="margin-left: 20px;">(2) Yes -- <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____</p> <p style="margin-left: 20px;">(3) Yes -- <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following):</p> <p style="margin-left: 40px;">Type of tank _____</p> <p style="margin-left: 40px;">Tank location _____</p> <p style="margin-left: 40px;">Filler cap location _____</p> <p style="margin-left: 40px;">Tank damage _____</p> <p style="margin-left: 40px;">Location of leakage _____</p> <p style="margin-left: 40px;">Type of fuel _____</p> <p style="margin-left: 20px;">(9) Unknown if more than two tanks</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>COMMENTS</b> </div> <div style="border: 1px solid black; height: 150px; margin-top: 5px;"></div>
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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*

(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

48

2. Case Number - Stratum

22 7K

3. Vehicle Number

02

### INTEGRITY

4. Passenger Compartment Integrity

98

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

06 & 07

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

### GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 6 18. LR 8 19. RR 8

20. BL 6 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(5) Glazing out-of-place by occupant contact and holed by occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 8 33. RF 8 34. LR 0 35. RR 0

36. BL 8 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 2 42. LR 0 43. RR 0

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

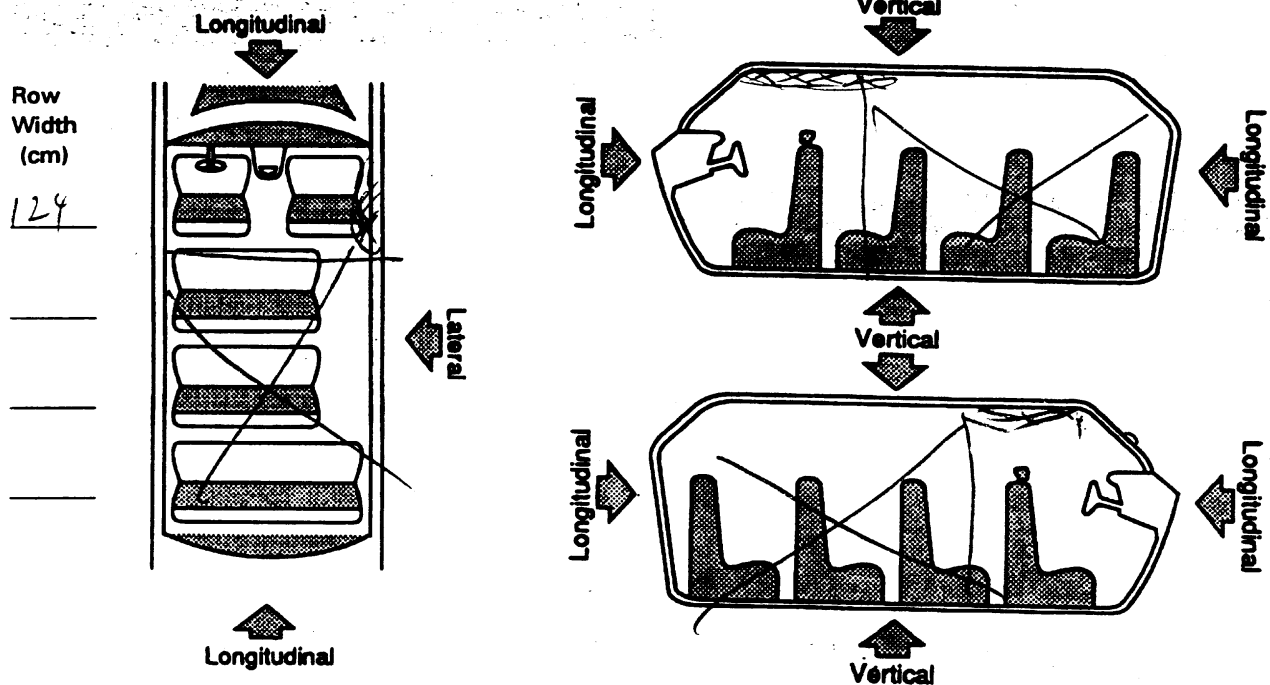
(3) Partially opened

(4) Fully opened

(9) Unknown

## INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				INTRUSION	DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	—	INTRUDED VALUE	=		
RF	Door	66	—	62	=	4	LAT
	SILL	69	—	60	=	9 (5)	}
	A-PILLAR	67	—	61	=	6	
	KICK PANEL	67	—	61	=	6	
	B-PILLAR	65	—	63	=	2	
RF	Roof	103	—	92	=	11 (2)	VERT
	Roof Side Rail	104	—	92	=	12 (1)	}
	<del>Rail</del>		—		=		
	WS Header	101	—	91	=	10 (3)	
	WS	95	—	87	=	8 (5)	
FC	Roof	103	—	94	=	9 (2)	}
	WS Header	101	—	94	=	7 (9)	
	WS	95	—	88	=	7 (10)	
LF	Roof	103	—	94	=	9 (7)	}
	WS Header	101	—	94	=	7	
	WS	95	—	89	=	6	

Document no more than the 15 most severe intrusions

Roof Side Rail

104

94

10 (4)

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>1</u> <u>3</u>	48. <u>1</u> <u>3</u>	49. <u>2</u>	50. <u>1</u>
2nd	51. <u>1</u> <u>3</u>	52. <u>1</u> <u>2</u>	53. <u>2</u>	54. <u>1</u>
3rd	55. <u>1</u> <u>3</u>	56. <u>1</u> <u>5</u>	57. <u>2</u>	58. <u>1</u>
4th	59. <u>1</u> <u>1</u>	60. <u>1</u> <u>3</u>	61. <u>2</u>	62. <u>1</u>
5th	63. <u>1</u> <u>3</u>	64. <u>1</u> <u>7</u>	65. <u>2</u>	66. <u>3</u>
6th	67. <u>1</u> <u>2</u>	68. <u>1</u> <u>2</u>	69. <u>2</u>	70. <u>1</u>
7th	71. <u>1</u> <u>1</u>	72. <u>1</u> <u>2</u>	73. <u>2</u>	74. <u>1</u>
8th	75. <u>1</u> <u>3</u>	76. <u>1</u> <u>4</u>	77. <u>2</u>	78. <u>1</u>
9th	79. <u>1</u> <u>2</u>	80. <u>1</u> <u>5</u>	81. <u>1</u>	82. <u>1</u>
10th	83. <u>1</u> <u>2</u>	84. <u>1</u> <u>4</u>	85. <u>1</u>	86. <u>1</u>

## LOCATION OF INTRUSION

Front Seat  
(11) Left  
(12) Middle  
(13) Right

Second Seat  
(21) Left  
(22) Middle  
(23) Right

Third Seat  
(31) Left  
(32) Middle  
(33) Right

Fourth Seat  
(41) Left  
(42) Middle  
(43) Right

(97) Catastrophic  
(98) Other enclosed area (specify)

(99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
	—		=	
	—	N/A	=	
	—		=	
	—		=	



**STEERING COLUMN****87. Steering Column Type** 1

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**88. Blank** X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

**89. Blank** X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

**90. Blank** X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

**91. Blank** X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

**92. Steering Rim/Spoke Deformation** 0 0

- Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

**93. Location of Steering Rim/Spoke Deformation** 0 0

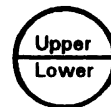
(00) No steering rim deformation

*Quarter Sections*

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

**INSTRUMENT PANEL****94. Odometer Reading** 167,000

\_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

103,481 miles X 1.6093 = 166,531 kilometers

Source: VI

**95. Instrument Panel Damage from Occupant Contact?** 0

- (0) No  
 (1) Yes  
 (9) Unknown

**96. Knee Bolsters Deformed from Occupant Contact?** 8

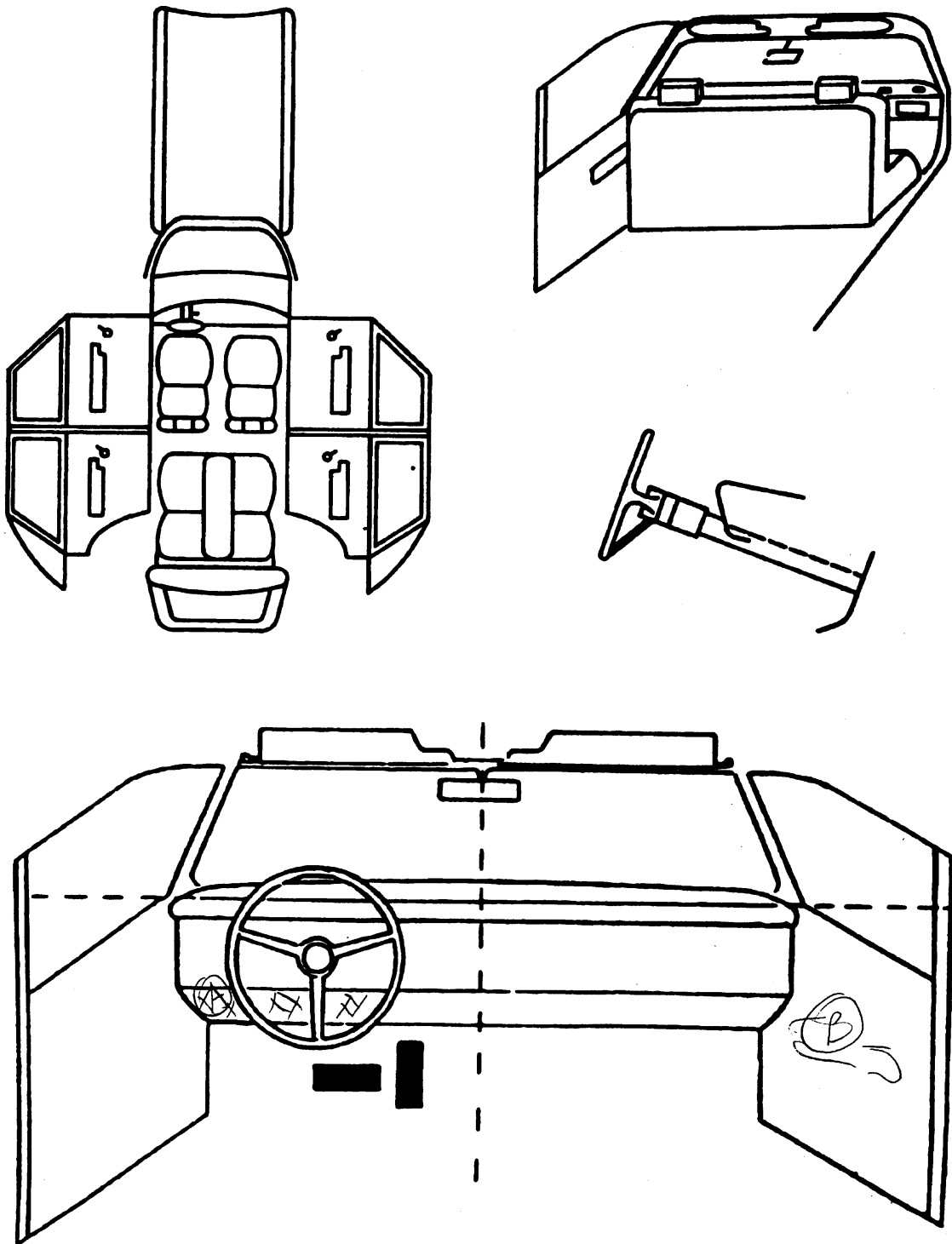
- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

**97. Did Glove Compartment Door Open During Collision(s)?** 0

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	DASH	1	KNEE	BUSTED	1
B	Door	2		SCUFF	2
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

## RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_
- (38) Right side window sill

## INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects

- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function	0	0
	Deployment		
	Failure		

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

#### Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use		
	Type		
	Proper Use		
	Failure Modes		

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown

## MANUAL RESTRAINTS

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	04	02	04
	Used in this crash?	4	0	4
	Proper Use	1	0	1
	Failure Modes	1	0	1
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used - type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

**Proper Use of Manual (Active) Belts**

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

**Belt Used Improperly**

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat			N/A			
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): \_\_\_\_\_
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): \_\_\_\_\_
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): \_\_\_\_\_

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): \_\_\_\_\_

- (29) Unknown orientation

- (99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**

(Specify make/model and occupant number)

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**HEAD RESTRAINTS/SEAT EVALUATION**

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R S T	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
S E C O N D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance	/	/	/
	Seat Orientation	/	/	/

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_
- (9) Unknown \_\_\_\_\_

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown \_\_\_\_\_

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown \_\_\_\_\_

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

NONE

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism:

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Component(s):

(Note in vehicle interior diagram)





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

48

2. Case Number - Stratum

227K

3. Vehicle Number

02

4. Occupant Number

01

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

17

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

1

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

183

Code actual height to the nearest  
centimeter.

(999) Unknown

72 inches X 2.54 = 182.8 centimeters

8. Occupant's Weight

070

Code actual weight to the nearest  
kilogram.

(999) Unknown

155 pounds X .4536 = 70.3 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 04

(00) None used, not available, or belt removed/destroyed

(01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

(0) None used or not available

(1) Belt used properly

(2) Belt used properly with child safety seat

*Belt Used Improperly*

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

(0) No manual belt used

(1) No manual belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

(0) Not equipped/not available

(1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

(0) Not equipped/not available

(1) Air bag deployed during accident (as a result of impact)

(2) Air bag deployed inadvertently just prior to accident

(3) Air bag deployed, accident sequence undetermined

(4) Nondeployed

(5) Unknown if deployed

(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(9) Unknown \_\_\_\_\_

23. Are There Indications of Air Bag System Failure? 0

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

(0) None used

(1) Police did not indicate restraint use

(2) Shoulder belt

(3) Lap belt

(4) Lap and shoulder belt

(5) Belt used, type not specified

(6) Child safety seat

(7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position0

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## 26. Seat Type (this Occupant Position)

05

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0032. Child Safety Seat Shield Usage 0033. Child Safety Seat Tether Usage 00Note: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 6

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 5

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

37. Hospital Stay 0 0

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

## STOP - GO TO VARIABLE 44 ON PAGE 7

## VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death 00

- \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 02

- \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**Check the Primary Source Used In Determining Belt Use.**

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

**ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?**

NO ☒ YES [ ]

**UPDATE CANDIDATE?**

NO [ ] YES ☒

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)  
(00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

51. Was the Occupant Given Blood? 1  
(1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
(00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination 1  
(0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

48

3. Vehicle Number

02

2. Case Number - Stratum

227K

4. Occupant Number

01

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

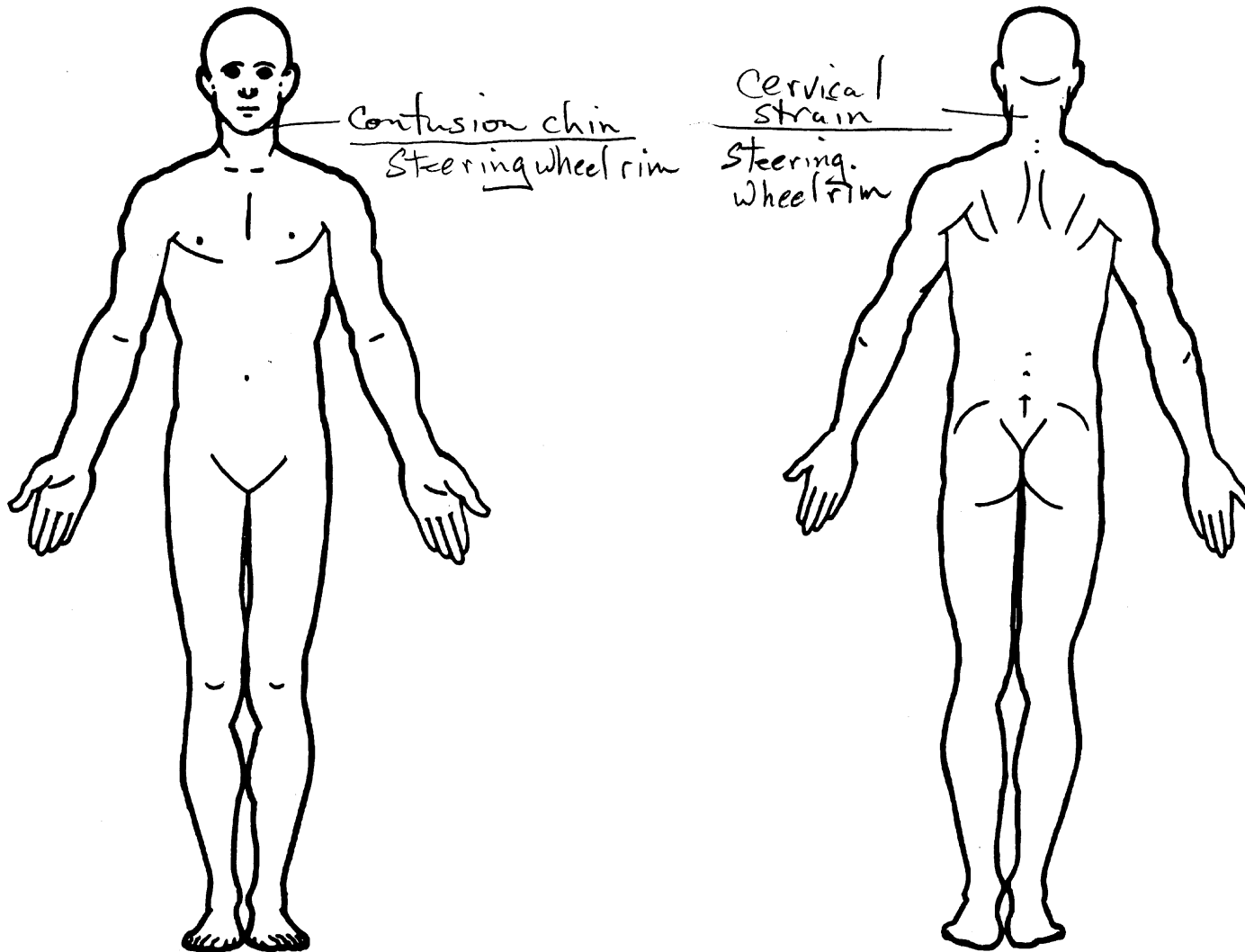
	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. <u>3</u>	6. <u>6</u>	7. <u>4</u>	8. <u>02</u>	9. <u>78</u>	10. <u>1</u>	11. <u>6</u>	12. <u>04</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>3</u>	17. <u>2</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>8</u>	23. <u>04</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____	35. ____	36. ____	37. ____
4th	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____	45. ____	46. ____	47. ____	48. ____
5th	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____	55. ____	56. ____	57. ____	58. ____	59. ____
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

**.I.S. - 90**

A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
11th	—	—	—	—	—	—	—	—	—	—	
12th	—	—	—	—	—	—	—	—	—	—	
13th	—	—	—	—	—	—	—	—	—	—	
14th	—	—	—	—	—	—	—	—	—	—	
15th	—	—	—	—	—	—	—	—	—	—	
16th	—	—	—	—	—	—	—	—	—	—	
17th	—	—	—	—	—	—	—	—	—	—	
18th	—	—	—	—	—	—	—	—	—	—	
19th	—	—	—	—	—	—	—	—	—	—	
20th	—	—	—	—	—	—	—	—	—	—	
21st	—	—	—	—	—	—	—	—	—	—	
22nd	—	—	—	—	—	—	—	—	—	—	
23rd	—	—	—	—	—	—	—	—	—	—	
24th	—	—	—	—	—	—	—	—	—	—	
25th	—	—	—	—	—	—	—	—	—	—	

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**SOURCE OF INJURY DATA****OFFICIAL**

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL**

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

**INJURY SOURCE****FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

**EXTERIOR of OCCUPANT'S VEHICLE**

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

**EXTERIOR OF OTHER MOTOR VEHICLE**

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify) \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

- (84) Ground
- (85) Other vehicle or object (specify) \_\_\_\_\_
- (86) Unknown vehicle or object

**NONCONTACT INJURY**

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

**DIRECT/INDIRECT INJURY**

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

**OCCUPANT INJURY CLASSIFICATION****Body Region**

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

**Type of Anatomic Structure**

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

**Specific Anatomic Structure**

- Whole Area
- (02) Skin - Abrasion
  - (04) Skin - Contusion
  - (06) Skin - Laceration
  - (08) Skin - Avulsion
  - (10) Amputation
  - (20) Burn
  - (30) Crush
  - (40) Degloving
  - (50) Injury - NFS
  - (90) Trauma, other than mechanical

- Head - LOC
- (02) Length of LOC
  - (04, 06, 08) Level of Consciousness
  - (10) Concussion

**Spine**

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

**Aspect**

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

Arterial Blood  
Gases

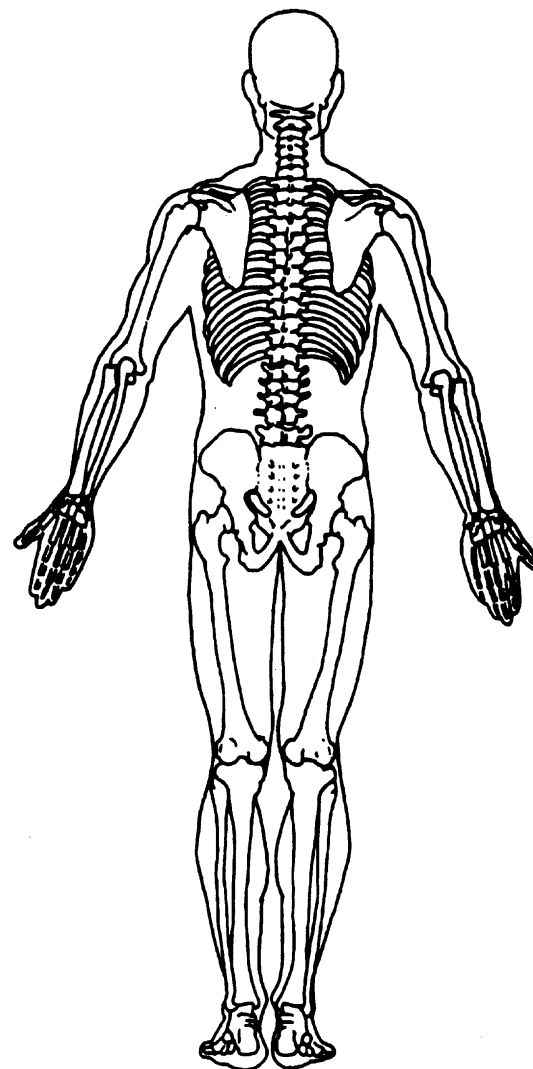
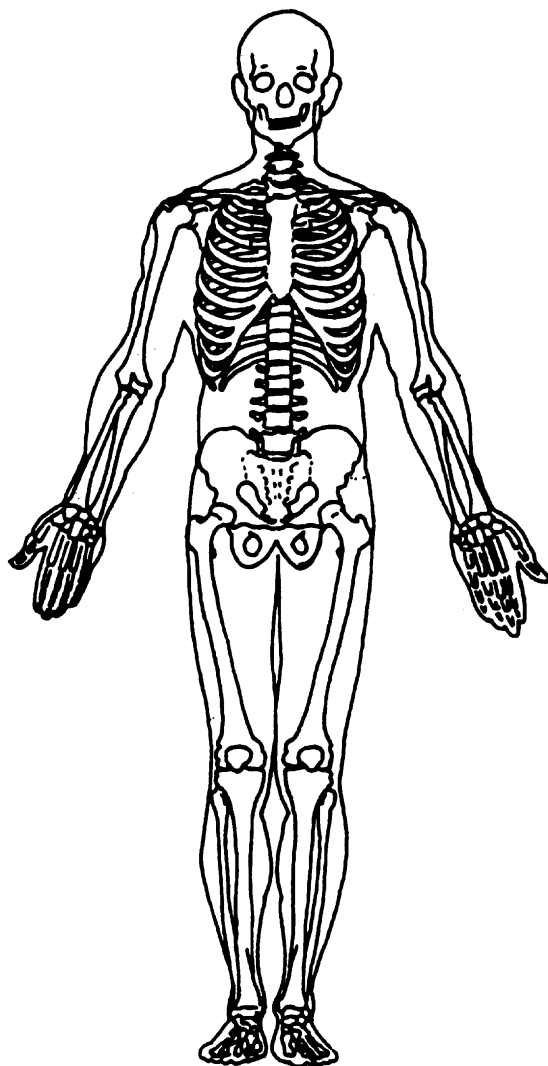
pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> \_\_\_

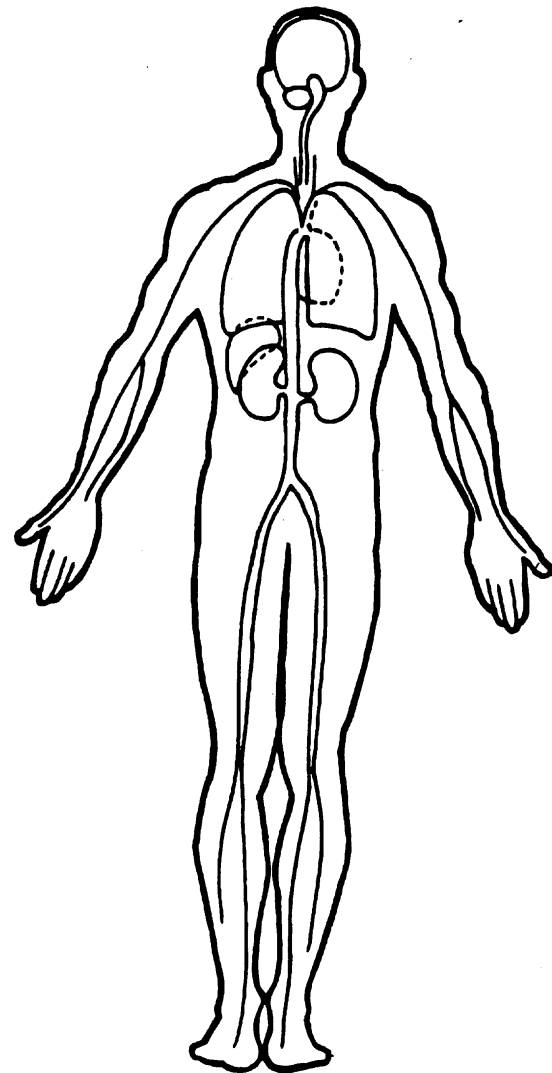
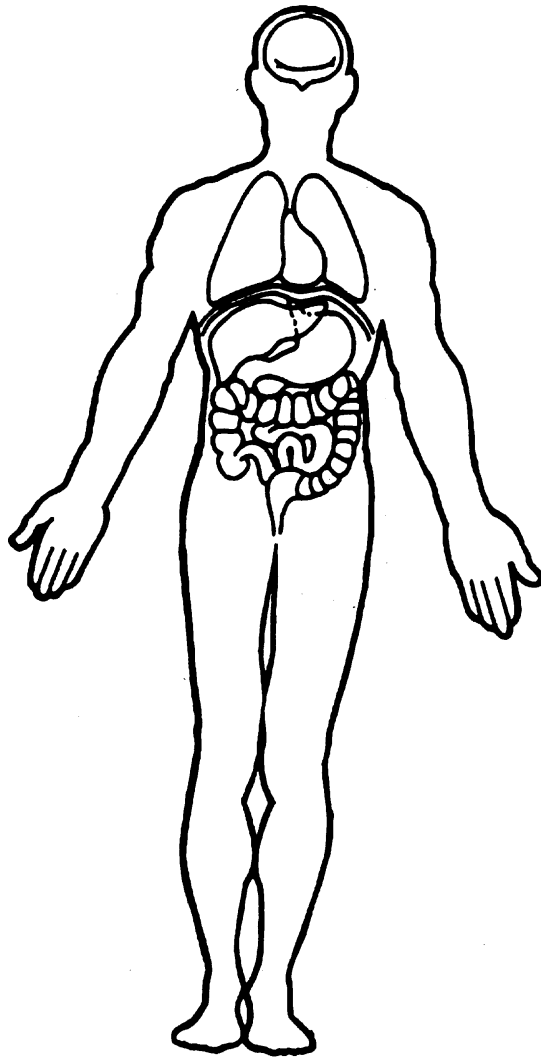
HCO<sub>3</sub> \_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

48

2. Case Number - Stratum

227K

3. Vehicle Number

02

4. Occupant Number

02

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

15

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

1

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

183

Code actual height to the nearest centimeter.

(999) Unknown

72 inches X 2.54 = 182.8 centimeters

8. Occupant's Weight

073

Code actual weight to the nearest kilogram.

(999) Unknown

160 pounds X .4536 = 72.5 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

13

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown



## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

(3) Shoulder belt worn under arm \_\_\_\_\_

(4) Shoulder belt worn behind back or seat \_\_\_\_\_

(5) Belt worn around more than one person \_\_\_\_\_

(6) Lap belt worn on abdomen \_\_\_\_\_

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position 0

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Seat Type (this Occupant Position) 05

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 032. Child Safety Seat Shield Usage 0 033. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 6

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 5

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for This Occupant 07

- \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**Check the Primary Source Used In Determining Belt Use.**

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO ☒ YES [ ]

UPDATE CANDIDATE?

NO [ ] YES ☒

**STOP - VARIABLES 50 THROUGH 53 ARE  
COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)  
(00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the  
initial GCS Score recorded at medical  
facility.  
(97) Injured, details unknown  
(99) Unknown if injured

51. Was the Occupant Given Blood? 1  
(1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
(00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination 1  
(0) Not equipped/not available/destroyed  
or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved

O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

48

3. Vehicle Number

02

2. Case Number - Stratum

227K

4. Occupant Number

02

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. <u>3</u>	6. <u>1</u>	7. <u>6</u>	8. <u>04</u>	9. <u>10</u>	10. <u>2</u>	11. <u>0</u>	12. <u>54</u>	13. <u>1</u>	14. <u>1</u>	15. <u>02</u>
2nd	16. <u>3</u>	17. <u>1</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>1</u>	23. <u>54</u>	24. <u>1</u>	25. <u>1</u>	26. <u>02</u>
3rd	27. <u>3</u>	28. <u>1</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>1</u>	34. <u>54</u>	35. <u>1</u>	36. <u>1</u>	37. <u>02</u>
4th	38. <u>3</u>	39. <u>6</u>	40. <u>4</u>	41. <u>02</u>	42. <u>78</u>	43. <u>1</u>	44. <u>6</u>	45. <u>54</u>	46. <u>1</u>	47. <u>2</u>	48. <u>02</u>
5th	49. <u>3</u>	50. <u>7</u>	51. <u>9</u>	52. <u>08</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>97</u>	57. <u>9</u>	58. <u>7</u>	59. <u>99</u>
6th	60. <u>3</u>	61. <u>8</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>1</u>	67. <u>30</u>	68. <u>1</u>	69. <u>1</u>	70. <u>97</u>
7th	71. <u>3</u>	72. <u>8</u>	73. <u>9</u>	74. <u>04</u>	75. <u>02</u>	76. <u>1</u>	77. <u>2</u>	78. <u>11</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

OCCUPANT INJURY DATA											
Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity						
11th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —

Body Region	Type of Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity
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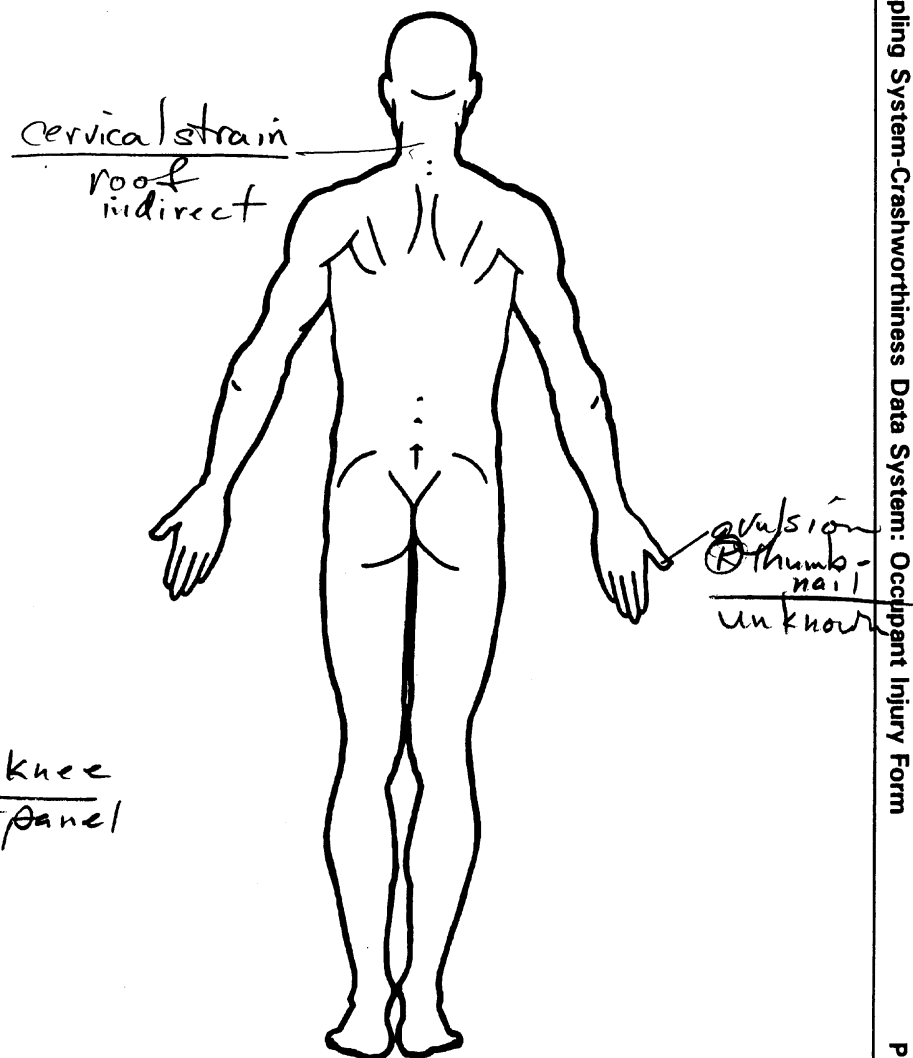
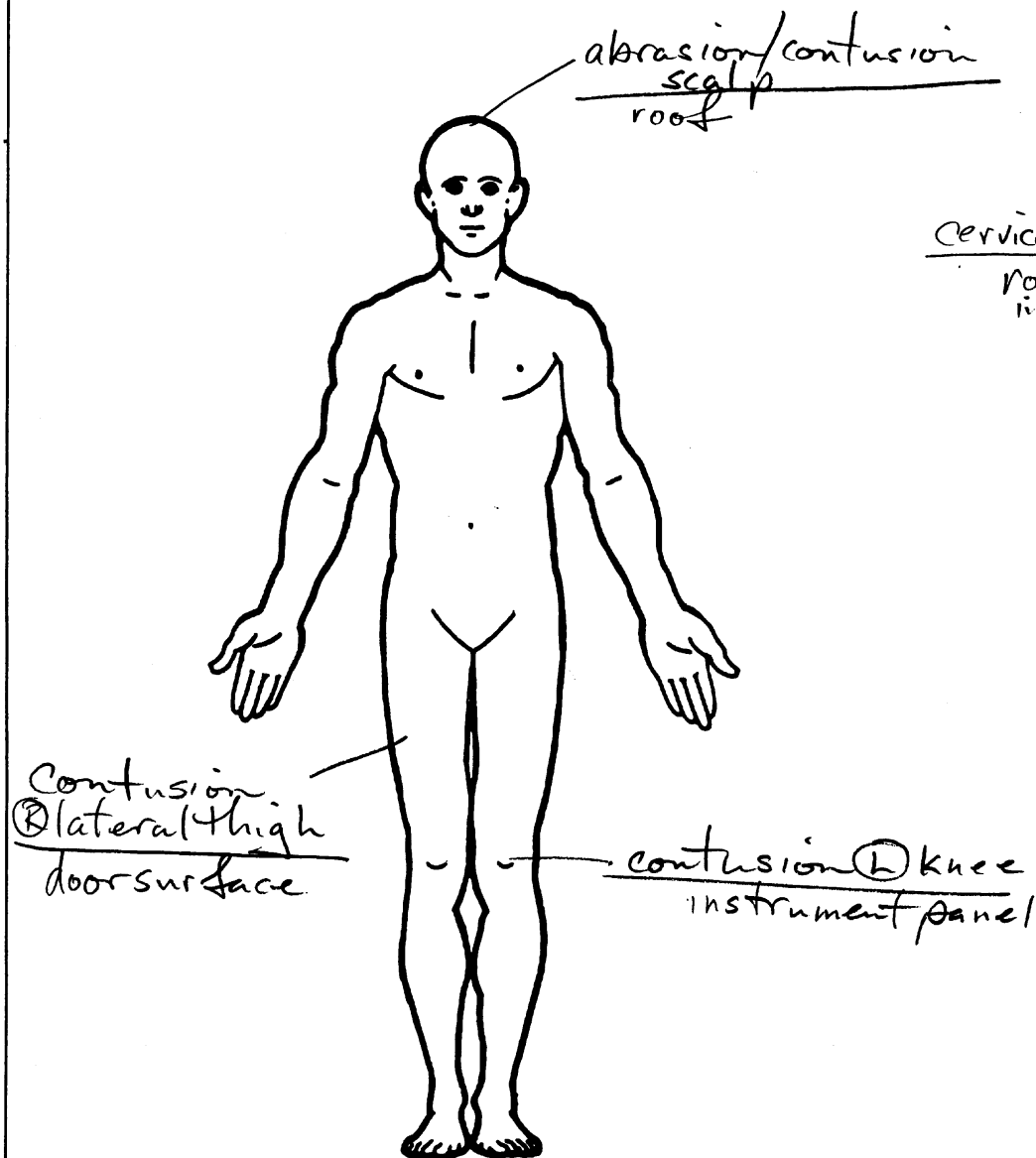
**Direct/  
Indirect  
Injury**

Occupant  
Area  
Intrusion  
Number



# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## SOURCE OF INJURY DATA

### OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR of OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

- Whole Area
- (02) Skin - Abrasion
  - (04) Skin - Contusion
  - (06) Skin - Laceration
  - (08) Skin - Avulsion
  - (10) Amputation
  - (20) Burn
  - (30) Crush
  - (40) Degloving
  - (50) Injury - NFS
  - (90) Trauma, other than mechanical

- Head - LOC
- (02) Length of LOC
  - (04, 06, 08) Level of Consciousness
  - (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

### Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

☐ No

☐ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_\_

Arterial Blood  
Gases

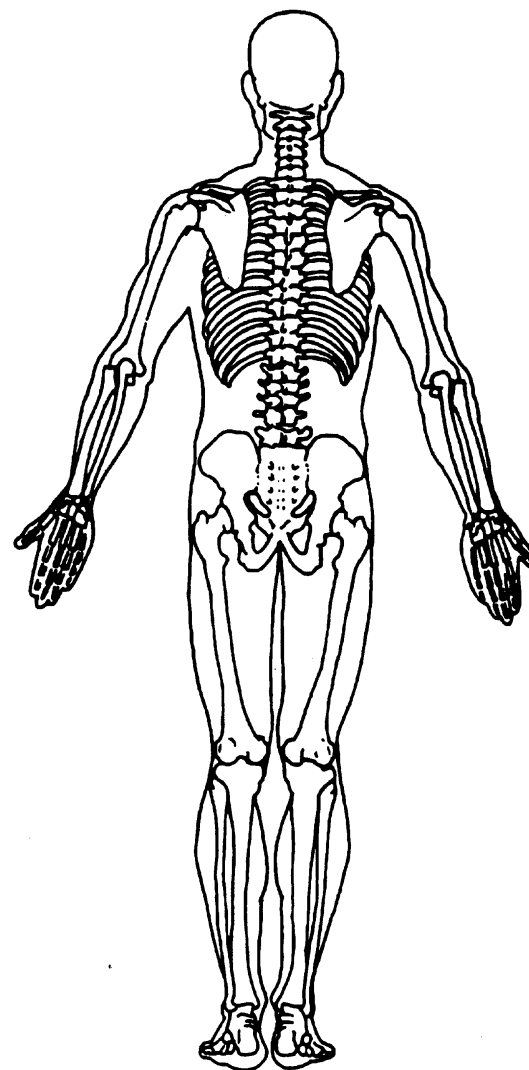
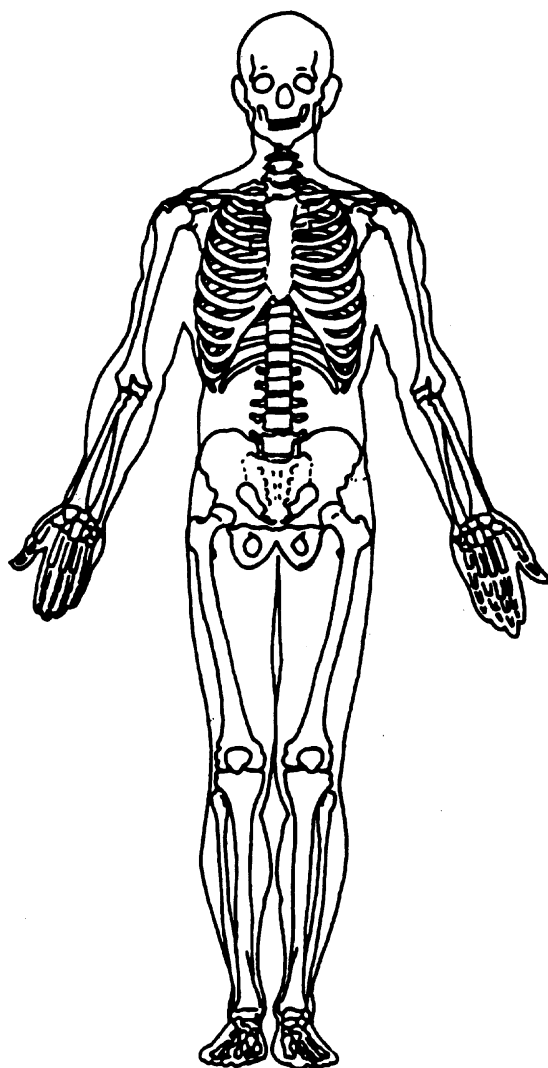
pH = \_\_\_\_\_

PO<sub>2</sub> = \_\_\_\_\_

PCO<sub>2</sub> \_\_\_\_\_

HCO<sub>3</sub> \_\_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



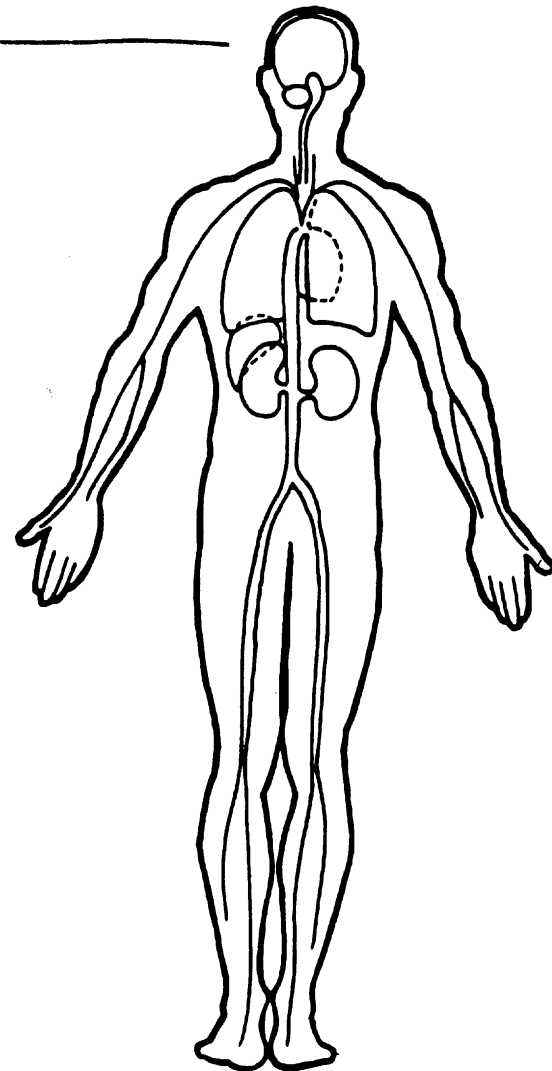
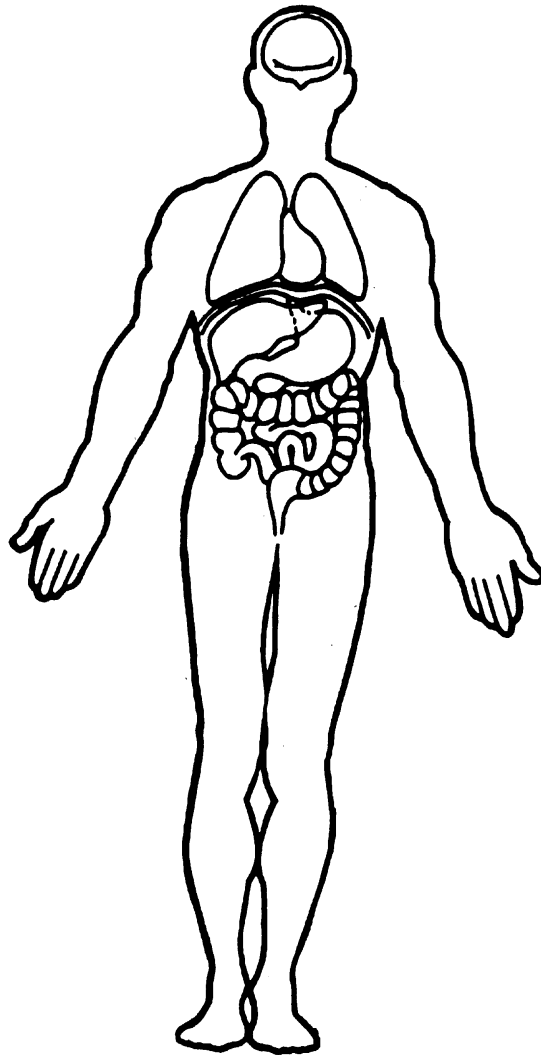
## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Amnesia for accident  
No LOC  
AO X3  

---

roof



# OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
17. Number of Occupants This Vehicle 02  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
18. Number of Occupant Forms Submitted 00

24. Rollover 0  
(0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*  
(1) Rollover, 1 quarter turn only  
(2) Rollover, 2 quarter turns  
(3) Rollover, 3 quarter turns  
(4) Rollover, 4 or more quarter turns (specify):  
\_\_\_\_\_
- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(9) Rollover (overturn), details unknown

# VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 9,990  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown
- \_\_\_\_\_, \_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs
- Source: \_\_\_\_\_
20. Vehicle Cargo Weight 9,990  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown
- \_\_\_\_\_, \_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

# OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*  
(1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_
- Underride (see specific CDC)*  
(4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_
- (7) Medium/heavy truck or bus override  
(9) Unknown

# RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
(0) No towed unit  
(1) Yes--towed trailing unit  
(9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0  
(0) No  
(1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
(0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted <45 degrees  
(4) Tilted ≥45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

# HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
(997) Noncollision  
(998) Impact with object  
(999) Unknown
27. Heading Angle For This Vehicle 000
28. Heading Angle For Other Vehicle 999

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	20 STOPPED 21, 22, 23	22 21 23 SLOWER 26, 28, 27	24 25 26 27 DECEL. 28, 30, 31	28 29 30 31 (EACH - 32) SPECIFICS OTHER	(EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 AVOID COLLISION WITH VEH.	37 AVOID COLLISION WITH OBJECT	(EACH - 42) (EACH - 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F Sideswipe Angle	44 45 46 47	48 49 50 51	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	50 51 LATERAL MOVE	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN		
	H Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 AVOID COLLISION WITH VEH.	57 AVOID COLLISION WITH OBJECT	(EACH - 52) (EACH - 53) SPECIFICS OTHER SPECIFICS UNKNOWN
	I Sideswipe Angle	64 65 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	68 69 INITIAL OPPOSITE DIRECTIONS	70 71 INITIAL SAME DIRECTIONS	72 73	(EACH - 74) (EACH - 75) SPECIFICS OTHER SPECIFICS UNKNOWN	
	K Turn Into Path	77 78 TURN INTO SAME DIRECTION	79 80 TURN INTO OPPOSITE DIRECTIONS	81 82	(EACH - 84) (EACH - 85) SPECIFICS OTHER SPECIFICS UNKNOWN	
V Intersecting Paths (Vehicle Damage)	L Straight Paths	87 88	89 90	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc.	92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

## OTHER DATA

### 56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 \_\_\_\_\_ Code actual 5-digit zip code  
 (99999) Unknown

### 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

### 58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

### 59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify): \_\_\_\_\_  
 (9) Unknown rollover initiation type

### 60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

### 61. Rollover Initiation Object Contacted

### 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (8) Non-contact rollover forces (specify): \_\_\_\_\_  
 (9) Unknown

### 63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

### 64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify): \_\_\_\_\_  
 (98) No driver present  
 (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object



PSU NUMBER  
CASE NUMBER  
VEHICLE NUMBER

48

227K

03

# EXTERIOR VEHICLE FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*



ENTIRE FORM



PAGE NUMBER (S)

-

PSU NUMBER

48

CASE NUMBER

227K

VEHICLE NUMBER

03

# INTERIOR VEHICLE FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*

☒ ENTIRE FORM

☐ PAGE NUMBER (S) \_\_\_\_\_



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## CRASHPC PROGRAM SUMMARY

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title <u>48</u> Primary Sampling Unit	<u>227K</u> Case No.-Stratum	<u>01</u> Accident Event Sequence No.	<u>[REDACTED] 94</u> Date (Month, day, year) of Run
CRASHPC Vehicle Identification			
Vehicle 1 <u>1986</u> Year	<u>Chev</u> Make	<u>Spectrum</u> Model	<u>1</u> NASS Veh. No.
Vehicle 2 <u>1989</u> Year	<u>GMC</u> Make	<u>S-15</u> Model	<u>2</u> NASS Veh. No.

## GENERAL INFORMATION

VEHICLE 1		VEHICLE 2	
Size <u>1</u>		Size <u>3</u>	
Weight $\frac{883}{\text{Curb}} + \frac{136}{\text{Occupant(s)}} + \frac{45}{\text{Cargo}} = 1064$ kg		Weight $\frac{1201}{\text{Curb}} + \frac{136}{\text{Occupant(s)}} + \frac{0}{\text{Cargo}} = 1337$ kg	
CDC <u>71 F D E W 3</u>		CDC <u>02 R D E W 3</u>	
PDOF (-180 to +180) <u>40°</u>		PDOF (-180 to +180) <u>50°</u>	
Stiffness <u>20</u>		Stiffness <u>3</u>	

## SCENE INFORMATION

Rest and Impact Positions [ ] No, Go To Damage Information [ ] Yes			
VEHICLE 1		VEHICLE 2	
Rest Position	X _____ m Y _____ m PSI _____ °	Rest Position	X _____ m Y _____ m PSI _____ °
Impact Position	X _____ m Y _____ m PSI _____ °	Impact Position	X _____ m Y _____ m PSI _____ °
Slip Angle (-180 to +180)	_____ °	Slip Angle (-180 to +180)	_____ °

## VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes			
VEHICLE 1		VEHICLE 2	
Vehicle Rotation [ ] No [ ] Yes		Vehicle Rotation [ ] No [ ] Yes	
Rotation Stop Before Rest [ ] No [ ] Yes		Rotation Stop Before Rest [ ] No [ ] Yes	
End of Rotation Position	X _____ m Y _____ m PSI _____ °	End of Rotation Position	X _____ m Y _____ m PSI _____ °
Curved Path [ ] No [ ] Yes		Curved Path [ ] No [ ] Yes	
Point on Path	X _____ m Y _____ m	Point on Path	X _____ m Y _____ m
Rotation Direction [ ] None [ ] CW [ ] CCW		Rotation Direction [ ] None [ ] CW [ ] CCW	
Rotation >360° [ ] No [ ] Yes		Rotation >360° [ ] No [ ] Yes	

**FRICTION INFORMATION**

Coefficient of Friction . \_\_\_\_\_

Rolling Resistance Option \_\_\_\_\_

## Vehicle 1 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

## Vehicle 2 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

**TRAJECTORY INFORMATION**

Trajectory Data [ ] No [ ] Yes

*If No, Go To Damage Information*

## Vehicle 1 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °

LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

## Vehicle 2 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °

LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary [ ] No [ ] Yes

## First Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

## Second Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

Secondary Coefficient of Friction . \_\_\_\_\_

**DAMAGE INFORMATION**

## VEHICLE 1

Damage Length L 150 cmCrush Depths C<sub>1</sub> 18 cmC<sub>2</sub> 22 cmC<sub>3</sub> 29 cmC<sub>4</sub> 34 cmC<sub>5</sub> 45 cmC<sub>6</sub> 67 cmDamage Offset D <sup>+</sup> 0 cm

## VEHICLE 2

Damage Length L 278 cmCrush Depths C<sub>1</sub> 0 cmC<sub>2</sub> 18 cmC<sub>3</sub> 27 cmC<sub>4</sub> 16 cmC<sub>5</sub> 6 cmC<sub>6</sub> 0 cmDamage Offset D <sup>+</sup> 185 cmIF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE *NOT IN TRANSPORT*, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

FINAL RUN 22

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

CRASH3 RECONSTRUCTION

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL	37 KPH ( 23 MPH)
LONGITUDINAL	-34 KPH ( -21 MPH)
LATITUDINAL	13 KPH ( 8 MPH)
PDOF ANGLE	-20 DEGREES
ENERGY DISSIPATED =	75673 JOULES ( 55806 FT-LB)

VEHICLE #2

TOTAL	29 KPH ( 18 MPH)
LONGITUDINAL	-19 KPH ( -12 MPH)
LATITUDINAL	-22 KPH ( -14 MPH)
PDOF ANGLE	50 DEGREES
ENERGY DISSIPATED =	47838 JOULES ( 35279 FT-LB)

# DAMAGE DATA

## VEHICLE #1

## VEHICLE #2

SIZE CATEGORY	1	3
STIFFNESS CATEGORY	1	3
VEHICLE WEIGHT	1064 KGS ( 2346 LBS)	1337 KGS ( 2948 LBS)
CDC	11FDEW3	02RDEW3
PDOF ANGLE	-20 DEGREES	50 DEGREES
CRUSH LENGTH	150 CM. ( 59 IN.)	278 CM. ( 109 IN.)
C1	18 CM. ( 7 IN.)	0 CM. ( 0 IN.)
C2	22 CM. ( 9 IN.)	18 CM. ( 7 IN.)
C3	29 CM. ( 11 IN.)	27 CM. ( 11 IN.)
C4	34 CM. ( 13 IN.)	16 CM. ( 6 IN.)
C5	45 CM. ( 18 IN.)	6 CM. ( 2 IN.)
C6	67 CM. ( 26 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	69 CM. ( 27 IN.)
D'	16 CM. ( 6 IN.)	49 CM. ( 19 IN.)

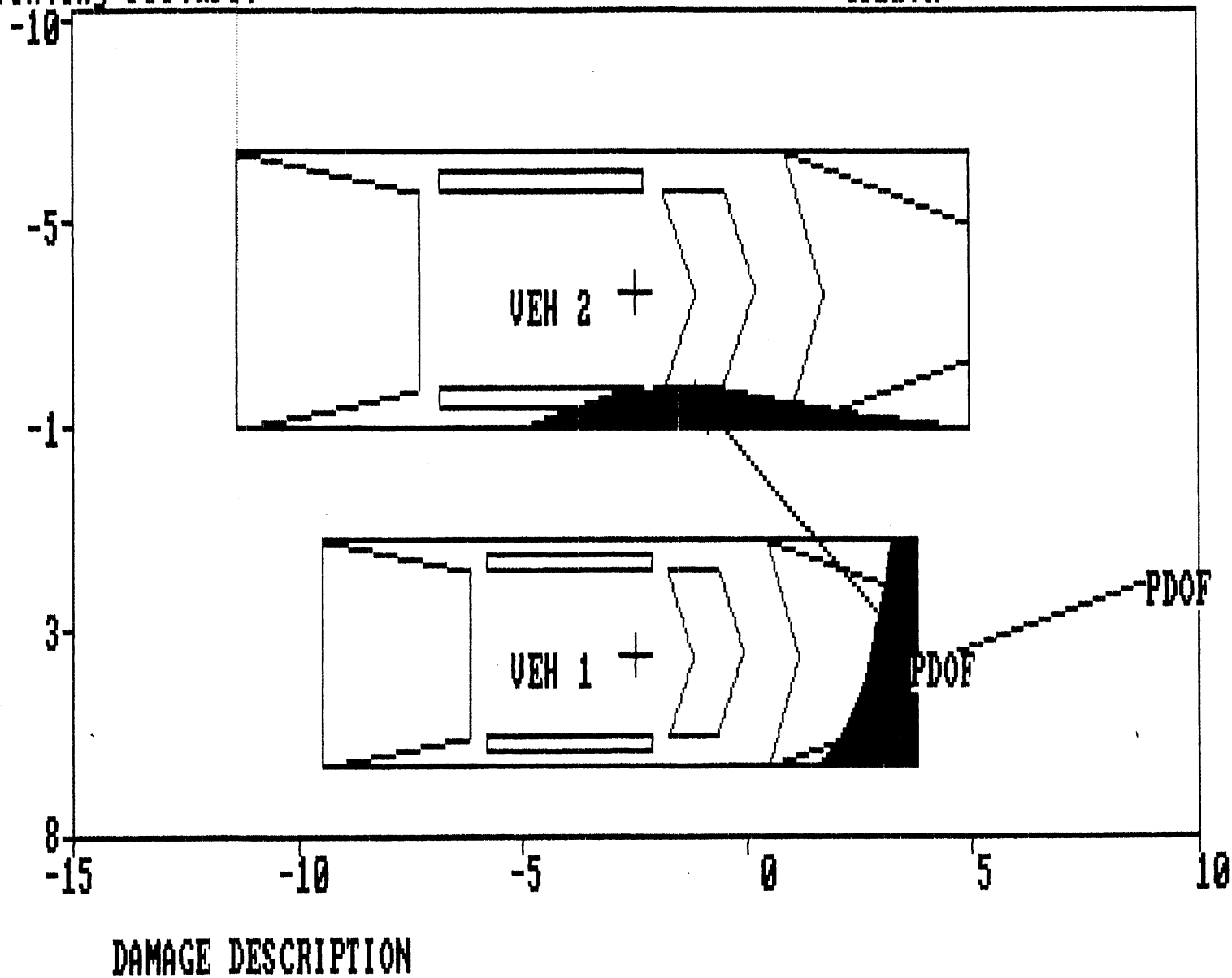
(\* INDICATES DEFAULT VALUE)

# DIMENSIONS AND INERTIAL PROPERTIES -----

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	115 CM. ( 45 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	122 CM. ( 48 IN.)	141 CM. ( 56 IN.)
TRACK	130 CM. ( 51 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	193 CM. ( 76 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-213 CM. ( -84 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	77 CM. ( 30 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	5550 KGS ( 12235 LBS)	11555 KGS ( 25475 LBS)
VEHICLE MASS	3 KGS ( 6 LBS)	3 KGS ( 8 LBS)

Printing Picture:

48227K





SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

p48 227K 01

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL	35 KPH ( 22 MPH)
LONGITUDINAL	-27 KPH ( -17 MPH)
LATITUDINAL	23 KPH ( 14 MPH)
PDOF ANGLE	-40 DEGREES
ENERGY DISSIPATED =	113868 JOULES ( 83974 FT-LB)

VEHICLE #2

TOTAL	28 KPH ( 17 MPH)
LONGITUDINAL	-18 KPH ( -11 MPH)
LATITUDINAL	-21 KPH ( -13 MPH)
PDOF ANGLE	50 DEGREES
ENERGY DISSIPATED =	47838 JOULES ( 35279 FT-LB)

# DAMAGE DATA

-----

## VEHICLE #1

## VEHICLE #2

SIZE CATEGORY	1	3
STIFFNESS CATEGORY	1	3
VEHICLE WEIGHT	1064 KGS ( 2346 LBS)	1337 KGS ( 2948 LBS)
CDC	11FDEW3	02RDEW3
PDOF ANGLE	-40 DEGREES	50 DEGREES
CRUSH LENGTH	150 CM. ( 59 IN.)	278 CM. ( 109 IN.)
C1	18 CM. ( 7 IN.)	0 CM. ( 0 IN.)
C2	22 CM. ( 9 IN.)	18 CM. ( 7 IN.)
C3	29 CM. ( 11 IN.)	27 CM. ( 11 IN.)
C4	34 CM. ( 13 IN.)	16 CM. ( 6 IN.)
C5	45 CM. ( 18 IN.)	6 CM. ( 2 IN.)
C6	67 CM. ( 26 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	185 CM. ( 73 IN.)
D'	16 CM. ( 6 IN.)	165 CM. ( 65 IN.)

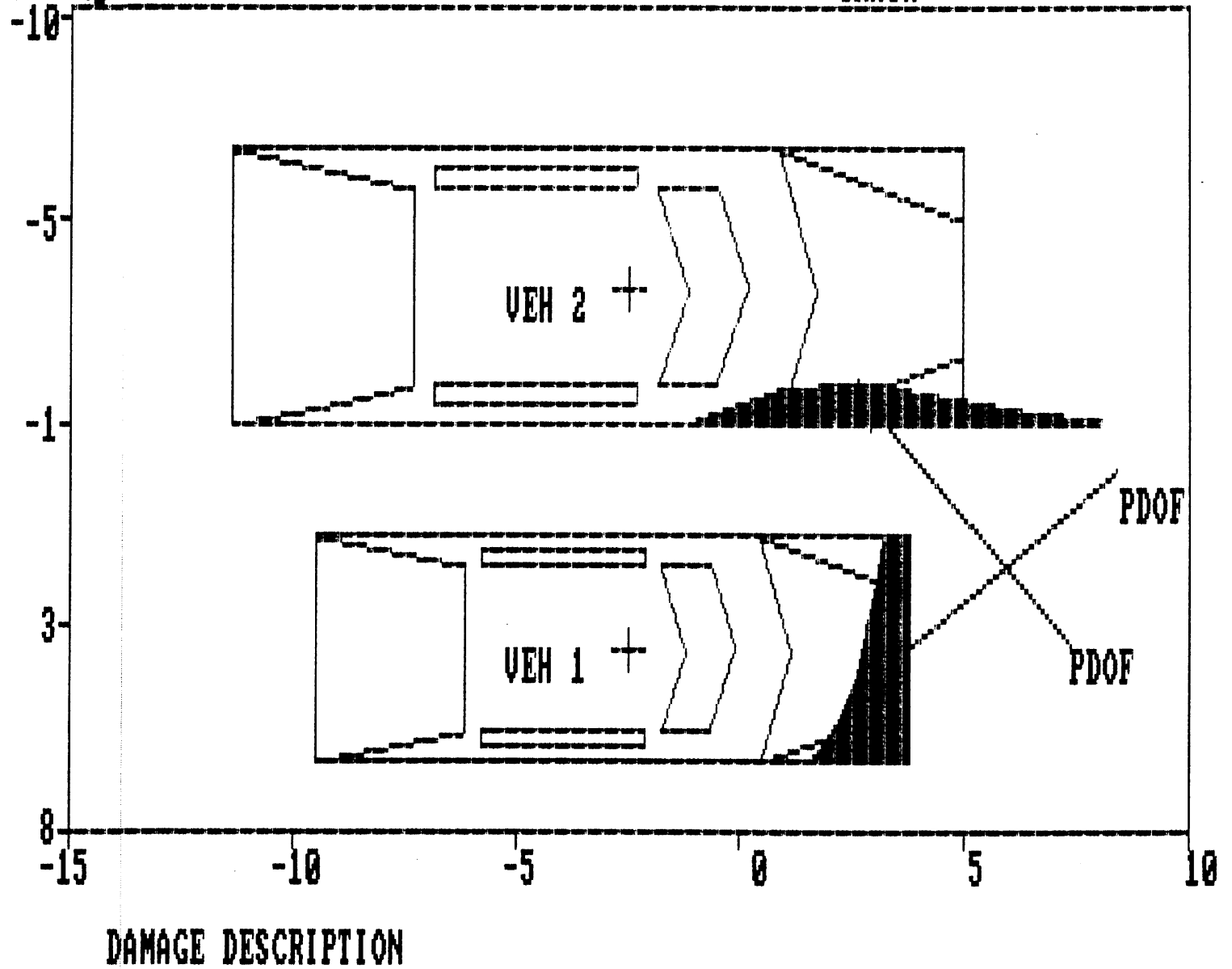
(\* INDICATES DEFAULT VALUE)

# DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	115 CM. ( 45 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	122 CM. ( 48 IN.)	141 CM. ( 56 IN.)
TRACK	130 CM. ( 51 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	193 CM. ( 76 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-213 CM. ( -84 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	77 CM. ( 30 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	5550 KGS ( 12235 LBS)	11555 KGS ( 25475 LBS)
VEHICLE MASS	3 KGS ( 6 LBS)	3 KGS ( 8 LBS)

Printing Picture:

CRASH



[illegible]

GENERAL VEHICLE Vehicle: 2

11

INTRA ERRORS

OGG0421 2 If ROLLOVER GV24 equals 1-9, then BASIS FOR DELTA V GV29 should  
GG0422 equal 4 or 5.

0

PSU48

ERROR SUMMARY SCREEN

000000/95

CASE 227K

CURRENT VERSION: 7.03

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	0	0	0	Y
General Vehicle	0	0	1	Y
Vehicle Exterior	0	0	0	Y
Vehicle Interior	0	0	0	Y
Occupant Assessment	0	0	0	Y
Occupant Interior	0	0	0	Y
Total Inter Errors		0	0	
Total Case Errors	0	0	1	



NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

HS Form 434B (1/94)



PSU 48-227K (1994) #1





PSU 48-227K (1994) #2



PSU 48-227K (1994) #3



PSU 48-227K (1994) #4



PSU 48-227K (1994) #5



PSU 48-227K (1994) #6



PSU 48-227K (1994) #7



PSU 48-227K (1994) #8



PSU 48-227K (1994) #9





PSU 48-227K (1994) #10



PSU 48-227K (1994) #11



PSU 48-227K (1994) #12



PSU 48-227K (1994) #13



PSU 48-227K (1984) #14



PSU 48-227K (1994) #15



PSU 48-227K (1994) #16



PSU 48-227K (1994) #17





PSU 48-227K(1994) #18



PSU 48-227K (1994) #19



PSU 48-227K (1994) #20



**PSU 48-227K (1994) #21**  
**Best Available**



**PSU 48-227K (1994) #22**  
**Best Available**



**PSU 48-227K (1994) #23**  
**Best Available**



PSU 48-227K (1994) #24



PSU 48-227K (1994) #25





**PSU 4B-227K (1994) #26**  
**Best Available**



**PSU 48-227K (1994) #27**  
**Best Available**



PSU 48-227K (1994) #28



FSU 48-227K (1994) #29



**PSU 48-227K (1994) #30**  
**Best Available**



**PSU 48-227K (1994) #31**  
**Best Available**



PSU 48-227K(1994) #32



PSU 48-227K (1994) #33





**PSU 48-227K (1994) #34**  
**Best Available**



**PSU 48-227K (1994) #35**  
**Best Available**



PSU 48-227K (1994) #36



**PSU 48-227K (1994) #37**  
**Best Available**



**PSU 48-227K (1994) #38**  
**Best Available**



PSU 48-227K (1994) #39  
Best Available



**PSU 48-227K (1994) #40**  
**Best Available**



PSU 48-227K (1994) #41





**PSU 48-227K (1994) #42**  
**Best Available**



**PSU 48-227K (1994) #43**  
**Best Available**



**PSU 48-227K (1994) #44**  
**Best Available**



**PSU 48-227K (1994) #45**  
**Best Available**



**PSU 48-227K (1994) #46**  
**Best Available**



**PSU 48-227K (1994) #47**  
**Best Available**



PSU 48-227K (1994) #48



PSU 48-227K (1984) #49





PSU 48-227K (1994) #50



FSU 48-227K (1994) #51



PSU 48-227K (1994) #52



PSU 48-227K (1994) #53



PSU 48-227K (1994) #54



PSU 48-227K (1994) #55



PSU 48-227K (1994) #56



PSU 48-227K (1984) #57





PSU 48-227K (1994) #58



PSU 48-227K (1994) #59



**PSU 48-227K (1994) #60**



PSU 48-227K(1994) #61



PSU 48-227K (1994) #62



PSU 48-227K (1994) #63



PSU 46-227K (1994) #64



PSU 48-227K (1994) #65





PSU 48-227K (1994) #68



PSU 48-227K (1994) #67



PSU 48-227K (1994) #68



PSU 48-227K (1994) #69



PSU 48-227K (1994) #70



**PSU 48-227K (1984) #71**



PSU 48-227K (1984) #72



**PSU 48-227K (1994) #73**  
**Best Available**





PSU 48-227K (1994) #74  
Best Available



**PSU 48-227K (1994) #75**  
**Best Available**



**PSU 48-227K (1994) #76**  
**Best Available**



**PSU 48-227K (1994) #77**



**PSU 48-227K (1994) #78**  
**Best Available**



**PSU 48-227K (1994) #79**  
**Best Available**



**PSU 48-227K (1994) #80**  
**Best Available**



**PSU 48-227K (1994) #81**  
**Best Available**





PSU 48-227K (1994) #82



**PSU 48-227K (1994) #83**